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(FILE 'HOME' ENTERED AT 13:49:56 ON 08 MAR 2007)

FILE 'STNGUIDE' ENTERED AT 13:50:08 ON 08 MAR 2007

FILE 'REGISTRY' ENTERED AT 13:50:25 ON 08 MAR 2007

STRUCTURE UPLOADED

L2 2 SEA SSS SAM L1

D SCAN

759 SEA SSS FUL L1 L3

STRUCTURE UPLOADED L4

L5 O SEA SSS SAM L4

. 38 SEA SSS FUL L4

STRUCTURE UPLOADED

0 SEA SSS SAM L7 L8

L9 4 SEA SSS FUL L7

FILE 'CAPLUS' ENTERED AT 14:03:15 ON 08 MAR 2007

2 SEA L9 L10

D IBIB AB HITSTR 1-2

FILE 'MARPAT' ENTERED AT 14:07:20 ON 08 MAR 2007

17 SEA SSS FUL L7 L11 L12

16 SEA L11 NOT L10

D IBIB AB FQHIT 1-16

FILE HOME

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Mar 2, 2007 (20070302/UP).

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

7 MAR 2007 HIGHEST RN 925547-09-7 STRUCTURE FILE UPDATES: HIGHEST RN 925547-09-7 DICTIONARY FILE UPDATES: 7 MAR 2007

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE CAPLUS

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FILE COVERS 1907 - 8 Mar 2007 VOL 146 ISS 11 FILE LAST UPDATED: 7 Mar 2007 (20070307/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

FILE MARPAT

FILE CONTENT: 1961-PRESENT VOL 146 ISS 10 (20070302/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

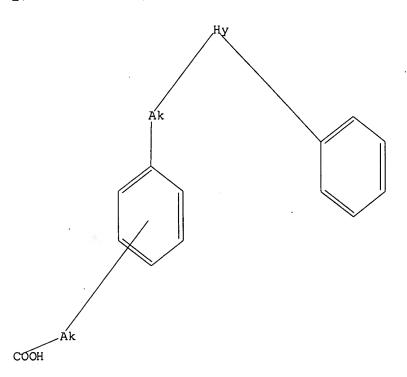
MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 2007010679 11 JAN 2007
DE 102005032332 11 JAN 2007
EP 1741773 10 JAN 2007
JP 2007008814 18 JAN 2007
WO 2007007938 18 JAN 2007
GB 2427406 27 DEC 2006
FR 2888248 12 JAN 2007
RU 2291880 20 JAN 2007
CA 2551930 08 JAN 2007

Expanded G-group definition display now available.

=> d que stat

L7 STR



Structure attributes must be viewed using STN Express query preparation. L9 4 SEA FILE=REGISTRY SSS FUL L7

L10 2 SEA FILE=CAPLUS L9
L11 17 SEA FILE=MARPAT SSS FUL L7
L12 16 SEA FILE=MARPAT L11 NOT L10

L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:56568 CAPLUS

DOCUMENT NUMBER:

140:402224

TITLE:

Detergents profoundly affect inhibitor potencies

against both cyclo-oxygenase isoforms

AUTHOR(S):

Ouellet, Marc; Falgueyret, Jean-Pierre; Percival, M.

David

CORPORATE SOURCE:

Department of Biochemistry and Molecular Biology,

Merck Frosst Centre for Therapeutic Research,

Pointe-Claire-Dorval, QC, 1005, Can.

SOURCE:

Biochemical Journal (2004), 377(3), 675-684

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER:

Portland Press Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

The sensitivity of Coxs (cyclo-oxygenases) to inhibition is known to be highly dependent on assay conditions. In the present study, the inhibitor sensitivities of purified Cox-1 and -2 were determined in a colorimetric assay using the reducing agent N, N, N', N'-tetramethyl-p-phenylenediamine (TMPD). With the detergent genapol X-100 (2 mM) present, the potencies of nimesulide, ibuprofen, flufenamic acid, niflumic acid and naproxen were increased over 100-fold against Cox-2 and titration curve shapes changed, so that maximal inhibition now approached 100%. Indomethacin, diclofenac and flosulide were not changed in potency. Similar effects of genapol were observed with inhibitors of Cox-1. DuP-697 and two analogs became more than 10-fold less potent against Cox-2 with genapol present. Tween-20, Triton X-100 and phosphatidylcholine, but not octylglucoside, gave qual. similar effects as genapol. Similar detergent-dependent changes in inhibitor potency were also observed using a [14C] arachidonic acid HPLC assay. increases in potency of ibuprofen, flufenamic acid, isoxicam and niflumic acid towards Cox-2 and ibuprofen towards Cox-1 were accompanied by a change from time-independent to time-dependent inhibition. interactions of Cox inhibitors has been described in terms of multiple binding step mechanisms. The genapol-dependent increase in inhibitor potency for ketoprofen was associated with an increase in the rate constant for the conversion of the initial enzyme-inhibitor complex to a second, more tightly bound form. The loss of potency for some inhibitors is probably due to inhibitor partitioning into detergent micelles. The present study identifies detergents as another factor that must be considered when determining

inhibitor potencies against both Cox isoforms.

IT 690657-94-4, Biaryl A

RL: BSU (Biological study, unclassified); BIOL (Biological study) (Cox inhibitor; detergent effects on inhibitor potencies against cyclooxygenase isoforms)

RN 690657-94-4 CAPLUS

CN Benzeneacetic acid, 4-[6-[5-(4-fluorophenyl)-4-[4-(methylsulfonyl)phenyl]-2-thienyl]hexyl]- (9CI) (CA INDEX NAME)

CAPLUS COPYRIGHT 2007 ACS on STN L10 ANSWER 2 OF 2

2002:888731 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 137:384743

Preparation of furan and thiophene derivatives that TITLE:

activate human peroxisome proliferator activated

Beswick, Paul John; Hamlett, Christopher Charles INVENTOR(S):

Frederick; Patel, Vipulkumar; Sierra, Michael

Lawrence; Ramsden, Nigel Grahame

PATENT ASSIGNEE(S):

Glaxo Group Limited, UK PCT Int. Appl., 141 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.			KIND DATE					APP		ION	NO.		D	ATE	
WO.	2002	0925	9n		A1	-	2002	1121		WO.			52		2	0020	509
""	W:	AE.	AG.	AL.	AM,	AT,	AU,	AZ,	BA,	ВВ	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
	•••	CO.	CR.	CU.	CZ.	DE.	DK,	DM,	DZ,	EC	, EE,	ES,	FI,	GB,	GD,	GE,	GH,
											, KG						
		LS.	LT.	LU,	LV.	MA.	MD,	MG.	MK,	MN	, MW	MX,	MZ,	NO,	NZ,	OM,	PH,
		PI.,	PT.	RO.	RU.	SD.	SE,	SG,	SI,	SK	, SL	TJ,	TM,	TN,	TR,	TT,	TZ,
							YU,					-					
	RW:	GH,	GM;	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ	UG,	ZM,	ZW,	AT,	BE,	CH,
•		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE	, IT	LU,	MC,	NL,	PT,	SE,	TR,
		BF.	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GÇ	, GW	ML,	MR,	NE,	SN,	TD,	TG
CA	2446	797			A1		2002	1121		CA	2002	-2446	797		2	0020	509
EP	1392	674			A1		2004	0303		EΡ	2002	-7225	06		2	0020	509
	1392	674			В1		2005	0810					•				
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	, TR						
HU	2003	0405	1		A2						2003						
· CN	1507	442			Α		2004	0623		CN	2002	-8096	94		2	0020	
BR	2002	0094	68		Α		2004			BR	2002 2002	-9468			2	0020	
JP	2004 3016 2247	5340	35		\mathbf{T}		2004			JP	2002	-5894	75		2	0020	
AT	3016	49			T		2005	0815		ΑT	2002	-7225	06		2	0020	
ES	2247	322			т3						2002						
IN	2003	KN01	287		Α					IN	2003	-KN12	87		. 2	0031	009
ZA	2003	0083	52		Α		2005				2003						
NO	2003	0049			Α		2003				2003					0031	
US	2004	1578	90		A1		2004			US	2004	-4761	94		2	0040	323
US	7091	237_			В2		2006	0815							_		
PRIORIT	YAPP	LN.	INFO	.:							2001						
										WO	2002	-GB21	.52		W 2	0020	509
amilian C	OTTOOR	101 .			MΛD	DΛΨ	137.	3817	1 2								

OTHER SOURCE(S): MARPAT 137:384743

The title compds. [I; X1 = 0, S, NH, NMe, alkyl; R1, R2 = H, alkyl; R3-R5 = H, Me, OMe, CF3, halo; m = 0-3; X2 = (CR10R11)n, O, S, OCH2; n = 1-2; R6, R7, R10, R11 = H, F, alkyl, etc.; one of Y and Z = CH, the other = S, O with the proviso that Y cannot be substituted and Z can only be substituted when it is carbon; R8 = (un) substituted Ph, pyridyl (wherein the N is in position 2 or 3) with the provision that when R3 = pyridyl, the N is unsubstituted; R9 = alkyl, CF3, CH2D (D = N-substituted piperazino, furyl, piperidino, etc.); R26, R27 = H, alkyl; or R26 and R27, together with the carbon atom to which they are bonded form a 3-5 membered cycloalkyl ring] and their pharmaceutically acceptable salts, useful for the treatment of a hPPAR mediated disease or condition such as dyslipidemia, syndrome X, heart failure, hypercholesteremia,

cardiovascular disease, type II diabetes mellitus, type I diabetes, insulin resistance, hyperlipidemia, obesity, anorexia bulimia, inflammation and anorexia nervosa, were prepared Thus, coupling {5-[4-(trilfuoromethyl)phenyl]-3-furyl}methanol with Et (4-mercapto-2-methylphenoxy)acetate followed by hydrolysis of the resulting ester afforded the acid II.

IT 476154-70-8P 476154-73-1P 476156-40-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of furan and thiophene derivs. that activate human peroxisome proliferator activated receptors)

RN 476154-70-8 CAPLUS

CN Benzenepropanoic acid, 4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

F₃C
$$CH_2-CH_2-CO_2H$$
 Me

RN 476154-73-1 CAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

F₃C
$$CH_2-CH_2-CH_2-CO_2H$$
 Me

RN 476156-40-8 CAPLUS

CN Benzenebutanoic acid, 2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

2

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

(Uses)

(preparation of indane acetic acid derivs. for treating diabetes, obesity, hyperlipidemia, and atherosclerotic diseases)

496062-92-1 HCAPLUS RN

1H-Indene-1-acetic acid, 5-[2-[2-[4-(5-acetyl-2-thienyl)phenyl]-5-methyl-4-CN oxazolyl]ethoxy]-2,3-dihydro- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:888731 HCAPLUS Full-text

DOCUMENT NUMBER:

137:384743

TITLE:

Preparation of furan and thiophene derivatives that

activate human peroxisome proliferator activated

receptors

INVENTOR(S):

Beswick, Paul John; Hamlett, Christopher Charles

Frederick; Patel, Vipulkumar; Sierra, Michael

Lawrence; Ramsden, Nigel Grahame

PATENT ASSIGNEE(S):

SOURCE:

Glaxo Group Limited, UK

PCT Int. Appl., 141 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PENT	NO.			KIN	D DATE			i		ICAT		NO.		Di	ATE	_
WO	2002	0925	90		A1	_	2002	1121	ļ				52		2	0020	509
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		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
								MG,									
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	ΤZ,
								ZA,									
	RW:	GH,															
								GB,									
	BF, BJ, C																
	CA 2446797 EP 1392674																
										EP 2	002-	7225	06		2	0020	509
EP	1392																
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		ΙE,	SI,	LT,	LV,			MK,									
HU	2003							0428									
CN	1507	442						0623									
BR	2002	0094	68		Α		2004	0803								0020	
JP	JP 2004534035							1111					75				
	AT 301649							0815									
ES	ES 2247322							0301					506				
IN	IN 2003KN01287							0317				KN12	•		2		
z_{A}	2003	0083	52		Α		2005	0127	•	ZA 2	003-	8352			2	0031	027

20031110 NO 2003004986 20031110 NO 2003-4986 20040323 US 2004157890 A1 20040812 US 2004-476194 US 7091237 B2 20060815 PRIORITY APPLN. INFO.: A 20010511 GB 2001-11523 W 20020509 WO 2002-GB2152

OTHER SOURCE(S):

MARPAT 137:384743

GΙ

$$R^{2}C - CR^{1}R^{2}L_{m} \times 1$$
 $R^{2}C - R^{2}L_{m} \times 1$
 $R^{2}C - R^{2}L_{m} \times 1$

$$_{\mathrm{HO_{2}C}}$$
 $_{\mathrm{CF_{3}}}$

The title compds. [I; X1 = O, S, NH, NMe, alkyl; R1, R2 = H, alkyl; R3-R5 = H, AB Me, OMe, CF3, halo; m = 0-3; X2 = (CR10R11)n, O, S, OCH2; n = 1-2; R6, R7, R10, R11 = H, F, alkyl, etc.; one of Y and Z = CH, the other = S, O with the proviso that Y cannot be substituted and Z can only be substituted when it is carbon; R8 = (un)substituted Ph, pyridyl (wherein the N is in position 2 or 3) with the provision that when R3 = pyridyl, the N is unsubstituted; R9 = alkyl, CF3, CH2D (D = N-substituted piperazino, furyl, piperidino, etc.); R26, R27 = H, alkyl; or R26 and R27, together with the carbon atom to which they are bonded form a 3-5 membered cycloalkyl ring] and their pharmaceutically acceptable salts, useful for the treatment of a hPPAR mediated disease or condition such as dyslipidemia, syndrome X, heart failure, hypercholesteremia, cardiovascular disease, type II diabetes mellitus, type I diabetes, insulin resistance, hyperlipidemia, obesity, anorexia bulimia, inflammation and anorexia nervosa, were prepared Thus, coupling {5-[4-(trilfuoromethyl)phenyl]-3-furyl}methanol with Et (4-mercapto-2methylphenoxy) acetate followed by hydrolysis of the resulting ester afforded the acid II.

476154-11-7P 476154-12-8P 476154-13-9P TΤ 476154-14-0P 476154-22-0P 476154-25-3P 476154-29-7P 476154-31-1P 476154-32-2P 476154-35-5P 476154-55-9P 476154-56-0P 476154-57-1P 476154-58-2P 476154-59-3P 476154-60-6P 476154-61-7P 476154-62-8P 476154-67-3P 476154-70-8P 476154-71-9P 476154-72-0P 476154-73-1P 476154-75-3P 476154-76-4P 476154-80-0P 476154-82-2P 476154-88-8P 476154-90-2P 476154-92-4P 476154-94-6P 476154-96-8P 476154-98-0P 476155-00-7P 476155-02-9P 476155-09-6P 476155-10-9P 476155-11-0P 476156-38-4P 476156-52-2P 476156-54-4P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of furan and thiophene derivs. that activate human peroxisome proliferator activated receptors)

RN 476154-11-7 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-12-8 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-13-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-14-0 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-22-0 HCAPLUS

CN Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-25-3 HCAPLUS

CN Acetic acid, [2-methyl-4-[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-29-7 HCAPLUS

CN Propanoic acid, 2-methyl-2-[2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-31-1 HCAPLUS

CN Propanoic acid, 2-methyl-2-[2-methyl-4-[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-32-2 HCAPLUS

CN Benzenepropanoic acid, 4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 476154-35-5 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 476154-55-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[(1-methylethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-S$$
 $CH_2-SPr-i$ $O-CH_2-CO_2H$

RN 476154-56-0 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-(phenoxymethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-S$$
 CH_2-OPh

RN 476154-57-1 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[(phenylmethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

F₃C
$$CH_2-S$$
 CH_2-S Ph

RN 476154-58-2 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[4-(trifluoromethyl)phenoxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-59-3 HCAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[4-(2-phenylethyl)phenoxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INI

(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-60-6 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[(4'-methyl[1,1'-biphenyl]-4-yl)oxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-61-7 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[(methylphenylamino)methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-62-8 HCAPLUS

CN Acetic acid, [4-[[[3-ethyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

RN 476154-67-3 HCAPLUS

CN Acetic acid, [2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-70-8 HCAPLUS

CN Benzenepropanoic acid, 4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

RN 476154-71-9 HCAPLUS

CN Acetic acid, [2-(1,1-dimethylethyl)-6-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-CH_2$$
 $O-CH_2-CO_2H$ Me

RN 476154-72-0 HCAPLUS

CN Acetic acid, [2,6-dimethyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-73-1 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

RN 476154-75-3 HCAPLUS

CN Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(trifluoromethoxy)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-76-4 HCAPLUS

CN Acetic acid, [2-methyl-4-[2-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-80-0 HCAPLUS

CN Acetic acid, [4-[2-[5-(4-cyano-3-fluorophenyl)-3-methyl-2-thienyl]ethyl]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

NC
$$S$$
 CH_2-CH_2 $O-CH_2-CO_2H$ Me

RN 476154-82-2 HCAPLUS

CN Acetic acid, [4-[1,1-dimethyl-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

RN 476154-88-8 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-methyl-5-[4-(trifluoromethoxy)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-90-2 HCAPLUS

CN Acetic acid, [4-[[5-[2,5-difluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{HO}_2\text{C}-\text{CH}_2-\text{O} \end{array} \\ \begin{array}{c} \text{O}-\text{CH}_2 \\ \text{Me} \end{array} \\ \begin{array}{c} \text{F} \\ \text{O} \end{array}$$

RN 476154-92-4 HCAPLUS

CN Acetic acid, [4-[[5-[2,3-difluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

RN 476154-94-6 HCAPLUS

CN Acetic acid, [4-[[5-[2-fluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

RN 476154-96-8 HCAPLUS
CN Acetic acid, [2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-3-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-98-0 HCAPLUS
CN Acetic acid, [2-methyl-4-[phenyl[5-[4-(trifluoromethyl)phenyl]-3thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-00-7 HCAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[phenyl[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-02-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-09-6 HCAPLUS

CN Acetic acid, [2-methyl-4-[[3-[[(1-methylethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-O$$
 CH_2-CO_2H $CH_2-SPr-i$

RN 476155-10-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-3-[(2,3,6-trimethylphenoxy)methyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-11-0 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[[6-methyl-2-(1-methylethyl)-4-pyrimidinyl]oxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476156-38-4 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-methyl-4-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476156-52-2 HCAPLUS

CN Acetic acid, [2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476156-54-4 HCAPLUS

Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(1,1,2-trifluoroethoxy)phenyl]-2-CN thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:575057 HCAPLUS Full-text

DOCUMENT NUMBER:

137:140514

TITLE:

Preparation of thiazole and oxazole derivatives as activators of human peroxisome proliferator activated

receptors

INVENTOR(S):

Banker, Pierette; Cadilla, Rodolfo; Lambert, Millard

Hurst, III; Rafferty, Stephen William; Sternbach,

Daniel David; Sznaidman, Marcos Luis

PATENT ASSIGNEE(S):

SOURCE:

Glaxo Group Limited, UK

PCT Int. Appl., 138 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.			KIND				i	APPL:	ICAT:	ION 1	NO.		D	ATE	
WO	2002	 0590:	98		 A1	-	2002	0801	,	WO 20	001-	JS51	 056		20	0011	219
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	ŪG,	US,	UZ,	VN,	YU,	ZA,	zw								
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,								GQ,							
EP	1349	843			A1		2003	1008		EP 20	001-	9945	14		2	0011	219
EP	1349	843			В1		2005	0420				•					
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	2004				_					JP 2					2	0011	219
AT	AT 293611 T 20050515 AT 2001-994514												20011219				

[(isobutylamino)carbonyl]biphenyl-2-carboxylic acid hydrochloride was shown. One of I inhibited human factor VIIa/tissue factor complex at IC50 2.2 μ M. 790230-67-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzoic acid derivs. having phenylcarbamoyl group via benzene or heterocyclic ring as factor VIIa inhibitors)

RN 790230-67-0 HCAPLUS

Benzoic acid, 2-[3-[[[3-(aminocarbonyl)phenyl]amino]carbonyl]-2-thienyl]-5-[[(2-methylpropyl)amino]carbonyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:878382 HCAPLUS Full-text

DOCUMENT NUMBER:

141:350161

TITLE:

INVENTOR(S):

IT

CN

Preparation of azole compounds as PTP1B inhibitors Ikemoto, Tomoyuki; Tanaka, Masahiro; Yuno, Takeo; Sakamoto, Johei: Nakanishi, Hiroyuki; Nakagawa,

Sakamoto, Johei; Nakanishi, Hiroyuki; Nakagawa, Yuichi; Ohta, Takeshi; Sakata, Shohei; Morinaga,

Hisayo

PATENT ASSIGNEE(S):

Japan Tobacco Inc., Japan PCT Int. Appl., 542 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

SOURCE:

IGUAGE: Japane

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D 1	DATE		i	APPL	ICAT:	ION I	.00		Dž	ATE	
WO	2004	 0899:	18		A1	_	2004	1021	,	WO 2	004-	JP51:	- - 19		2	0040	409
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		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
		LK, LR, LS		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO, NZ, OM		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
TD, TG																	
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CA	2521	830			A1 20041021 CA 2004~2521830 200404											409		
	1553				A1		2005	0713]	EP 2	2004-	7267	65			0040		
	R:	AT,	RE.	CH,	DE,	DK,		FR,	GB,		IT,		LU,	NI				
	14.				LV,	•	•	MK,		•	TR,	•	•	•	•	•	•	HR
			•	ш,	•					•	•	•	•	, 20	•	•	•	1111
BR	2004	00913	36		Α		2006	0425		BR 2	2004-	9136			2	0040	409	
CN	1780	823			Α	:	2006	0531	(CN 2	2004-	8000	9487		2	0040	409	
JP	3819	415			В2	2 20060906 JP 2005-505323									2	0040	409	
JР	2005	2724	76		Α		2005	1006		JP 2	2005-	1337	55		2	0050	428	
US	2006	12218	31		A1		2006	0608	1	US 2	2005-	1768	46	•	2	0050	707	
NO	2005	0052	46		Α		2005	1221]	NO 2	2005-	5246			2	0051	108	
PRIORITY	Y APP	LN.	INFO	.:						JP 2	2003-	1052	67		A 2	0030	409	
										JP 2	2003-	1575	90		A 2	0030	603	
									,	JP 2	2005-	5053	23		A3 2	0040	409	
									1	WO 2	2004-	JP51	19	. 1	₩ 2	0040	409	

OTHER SOURCE(S):

MARPAT 141:350161

GI

$$R - \left\{L\right\}_{p} \cdot CH2 \cdot X - \left\{L\right\}_{n} \cdot X - \left\{L\right\}_{m} \cdot X - \left\{$$

Title compds. I [V = N, CH; W = S, O; m = 0-2; R1, R2 = H, alkyl; X = NR4, etc.; R4 = H, alkyl; n = 0-4; p = 0, 1; L = CR20R21, etc.; R20 = H, alkyl, etc.; R21 = H, alkyl, etc.; R = CO2R19, etc.; R19 = H, alkyl; B = aryl, heteroaryl; R3 = H, halo, etc.; Y = O, etc.; s = 0, 1; A = (un)substituted alkylene with cycloalkyl; Z = cycloalkyl, etc.] were prepared For example, O-alkylation of 5-hydroxynicotinic acid Me ester with compound II [Q = Cl], e.g., prepared from 4-bromoacetylbenzoic acid in 5 steps, followed by saponification afforded compound II [3-carboxypyridin-5-yloxy] in 44.1% overall yield. In PTP1B (protein tyrosine phosphatase 1B) inhibition assays, the IC50 value of compound II [Q = 3-carboxypyridin-5-yloxy] was 0.28 μ M. Compds. I are claimed useful for the treatment of obesity, diabetes, etc. Formulations are given.

IT 776311-53-6P 776311-54-7P 776311-55-8P 776311-56-9P 776311-57-0P 776311-58-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azole compds. as PTP1B inhibitors for treatment of obesity and diabetes)

RN 776311-53-6 HCAPLUS

CN Benzoic acid, 4-[[(dimethylamino)acetyl]amino]-3-[[4-[4-[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 776311-54-7 HCAPLUS

CN Benzoic acid, 4-[(2-methyl-1-oxopropyl)amino]-3-[[4-[4-[4-[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 776311-55-8 HCAPLUS

CN Benzoic acid, 4-[[4-[4-[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 776311-56-9 HCAPLUS

CN Benzoic acid, 4-[methyl(methylsulfonyl)amino]-3-[[4-[4-[4-[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

CH(Pr-n)2

RN 776311-57-0 HCAPLUS

CN Benzoic acid, 4-[[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]thio]- (9CI) (CA INDEX NAME)

776311-58-1 HCAPLUS RN

Benzoic acid, 4-amino-3-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-CN thienyl]methoxy]- (9CI) (CA INDEX NAME)

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 16

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:606464 HCAPLUS Full-text

DOCUMENT NUMBER:

141:140430

TITLE:

Preparation of fused heterocyclic derivatives as PPAR

modulators for treatment of diabetes mellitus,

syndrome X, and atherosclerosis

INVENTOR(S):

Conner, Scott Eugene; Knobelsdorg, James Allen; Mantlo, Nathan Bryan; Mayhugh, Daniel Ray; Wang, Xiaodong; Zhu, Guoxin; Schkeryantz, Jeffrey Michael

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA PCT Int. Appl., 234 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

RN 728038-97-9 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]butoxy]- (9CI) (CA INDEX NAME)

RN 728038-98-0 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-methyl-1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-99-1 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-2-phenylethoxy]- (9CI) (CA INDEX NAME)

L13 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:412803 HCAPLUS Full-text

DOCUMENT NUMBER:

141:1264

TITLE:

Receptor function controlling agent

INVENTOR(S):

Fukatsu, Kohji; Sasaki, Shinobu; Hinuma, Shuji; Ito,

Yasuaki; Suzuki, Nobuhiro; Harada, Masataka; Yasuma,

Tsuneo

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

PCT Int. Appl., 442 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.			KIND DATE			i						D	ATE			
WO	2004	0412	 66		A1	-	2004	0521	,			JP14:			20	0031	106	
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					CZ,													
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
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			•		UA,													
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					GB,													
	•	TR,	BF,	ВJ,	CF,													TG
	2505				A1			0521										
					A1 20040607 AU 2003-277576 A 20050120 JP 2003-376833													
JF	2005	0154	61		Α		2005	0120	1	JP 2	003-	3768	33		21	0031	106	
EF	1559																	
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CN	1735	408			. A		2006	0215										
PRIORIT	Y API	PLN.	INFO	.:		JP 2002-324												
															0030			
																0030		
										WO 2	003-	JP14	139		w 2	0031	106	

MARPAT 141:1264 OTHER SOURCE(S):

A GPR40 receptor function controlling agent which contains a compound having AB an aromatic ring and a group capable of releasing a cation and is useful as a insulin secretion promoting agent or a preventive/remedy for diabetes, etc. 691904-71-9P ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(GPR40 receptor function controlling agents as antidiabetics)

691904-71-9 HCAPLUS RN

Benzenepropanoic acid, 4-[[5-(2,6-dimethylphenyl)-2-thienyl]methoxy]-'CN (9CI) (CA INDEX NAME)

L13 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2004:181798 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

140:217508

TITLE:

Preparation of thiophenes as selective

10/540,330

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L9
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L11
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L12
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                BRYAN"/AU)
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L16
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              5 SEA ABB=ON PLU=ON L14 AND L15 AND L16
L17
             21 SEA ABB=ON PLU=ON L14 AND (L15 OR L16)
L18
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L19
L20
              5 SEA ABB=ON PLU=ON L19 AND PPAR
           8707 SEA ABB=ON PLU=ON "PEROXISOME PROLIFERATOR-ACTIVATED
L21
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L22
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L23
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                D STAT QUE L23
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FILE HCAPLUS

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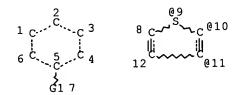
FILE COVERS 1907 - 13 Mar 2007 VOL 146 ISS 12 FILE LAST UPDATED: 12 Mar 2007 (20070312/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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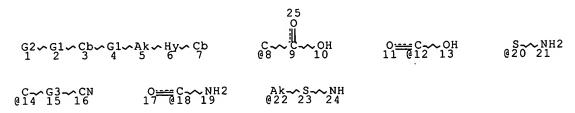
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STEREO ATTRIBUTES: NONE

L8 116215 SEA FILE=REGISTRY SSS FUL L6

L9 STR



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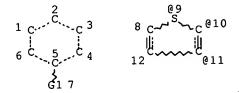
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STEREO ATTRIBUTES: NONE

L11 STR



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RSPEC I

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

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L13 32 SEA FILE=HCAPLUS ABB=ON PLU=ON L12

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L13 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1272380 HCAPLUS Full-text

DOCUMENT NUMBER: 146:100309

TITLE: Insights into the mechanism of the site-selective

sequential palladium-catalyzed cross-coupling

reactions of dibromothiophenes/dibromothiazoles and

arylboronic acids. Synthesis of PPAR β/δ

agonists

AUTHOR(S): Pereira, Raquel; Furst, Audrey; Iglesias, Beatriz;

Germain, Pierre; Gronemeyer, Hinrich; de Lera, Angel

R.

CORPORATE SOURCE: Departamento de Quimica Organica, Universidade de

Vigo, Vigo, 36310, Spain

SOURCE: Organic & Biomolecular Chemistry (2006), 4(24),

4514-4525

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

AB A reactivity study, aided by NMR spectroscopy, allowed a mechanistic rationale

to be postulated for the palladium-catalyzed regioselective coupling of

arylboronic acid (and arylstannane where feasible) at the position next to the

sulfur atom in functionalized dibromothiophenes and dibromothiazoles. The anal. of the NMR spectra (using 19F from the boronic acid CF3 group and 31P from the phosphine of the catalyst as probes) of the entire reaction starting from the dibromoheterocycles allowed the qual. proposal that the transmetalation is the rate-limiting step for both sequential substitution processes. The extremely facile oxidative addition at the C-Br bond next to the sulfur atom of the heterocycle instead dets. the positional selectivity. An addnl. Stille reaction then replaced the second halogen, providing the trisubstituted heterocyclic scaffolds of PPAR ligands, which displayed PPAR β agonist activity, as revealed by reporter assays in living cells.

IT 476154-13-9P 918164-63-3P 918164-64-4P

918164-65-5P

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target PPAR β/δ agonist; mechanism of the site-selective sequential Pd-catalyzed cross-coupling reactions of dibromothiophenes/dibromothiazoles and arylboronic acids and synthesis of PPAR β/δ agonists)

RN 476154-13-9 HCAPLUS

Acetic acid, [2-methyl-4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 918164-63-3 HCAPLUS

CN Acetic acid, 2-[2-methyl-4-[[[4-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

RN 918164-64-4 HCAPLUS

CN Acetic acid, 2-[4-[[[4-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

918164-65-5 HCAPLUS RN

Acetic acid, 2-[4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-CN thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 110 CITED REFERENCES AVAILABLE FOR 110 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L13 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2006:1253037 HCAPLUS Full-text

ACCESSION NUMBER: DOCUMENT NUMBER:

146:33027

TITLE:

Pharmaceutical composition comprising vitamin k Inoue, Satoshi; Sato, Seiji; Kyokawa, Yoshimasa;

Sugita, Ken-Ichi; Torii, Mikinori

PATENT ASSIGNEE(S):

Shionogi & Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 91pp. CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT 1	NO.			KIND DATE			1	APPL	ICAT:	ION I	NO.		Di	ATE		
WO	2006	1265	41		A1	_	2006:	1130	,	WO 2	006-	JP31	0249		2	0060	523
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	ΒĢ,	BR,	BW,	BY,	.BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	zw											
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ΖW,	ΑM,	ΑZ,	BY,
KG, KZ, MD,				MD,	RU,	TJ,	TM										

PRIORITY APPLN. INFO.:

JP 2005-155837 A 20050527

It is found that a compound having a PPAR δ agonistic activity induces abnormal blood coagulation or a muscular disorder. A pharmaceutical composition comprising the combination of a compound having a PPARô agonistic activity and a vitamin K can prevent the abnormal blood coagulation. A pharmaceutical composition comprising a vitamin K can prevent the muscular disorder.

728038-95-7 IT

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical composition comprising vitamin k)

728038-95-7 HCAPLUS RN

Benzenepropanoic acid, 2-methyl-4-[(2R)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2006:887897 HCAPLUS Full-text ACCESSION NUMBER:

145:293047 DOCUMENT NUMBER:

Preparation of heterocyclic compounds as activators TITLE:

for peroxisome proliferator activated receptor δ Sakuma, Shogo; Mochiduki, Nobutaka; Takahashi, Rie; INVENTOR(S):

Hirai, Toshitake; Yamakawa, Tomio; Masui, Seiichiro

Nippon Chemiphar Co., Ltd., Japan PATENT ASSIGNEE(S):

PCT Int. Appl., 115pp. SOURCE:

CODEN: PIXXD2 Patent DOCUMENT TYPE:

Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

					KIND DATE			i	APPL	ICAT:	ION I	NO.			ATE		
	2006				A1		2006	0831	Ţ	WO 2	006-	JP30	4193				
	W:	ΑĒ,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	ΚP,	KR,
		KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	ΜŻ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM							•			
RIT	ITY APPLN. INFO.:					JP 2005-52762						7	A 2	0050	228		
R S	SOURCE(S):				MARPAT 145:293047												

Ι

PRIO OTHE

GΙ

$$R1 \xrightarrow{Y} (CH_2) \xrightarrow{n-A-B} - \frac{R^2}{R^3} \xrightarrow{R_4} \frac{Z}{R^5} \xrightarrow{CO_2H}$$

The title compds. I [R1, R4 = H, alkyl, alkenyl, etc.; R2 = H; R3 = alkyl; or CR2R3 is CO, or CR2R3 is C=CR7R8; R7, R8 = H, alkyl; R5, R6 = H, alkyl, haloalkyl; X, Y = CH, N; Z = O, S; A = (un)substituted pyrazole, thiophene, furan, or pyrrole ring; B = (un)substituted alkylene; n = 0 - 5] are prepared Thus, $2-[4-[3-[3-isopropyl-1-(4-trifluoromethylphenyl)-1H- pyrazol-4-yl]propionyl]-2-methylphenoxy]-2-methylpropionic acid was prepared in a multistep process from [3-isopropyl-1-(4-trifluoromethylphenyl)-1H- pyrazol-4-yl]methanol. In an assay for the activation of peroxisome proliferator-activated receptor <math>\delta$, compds. of this invention showed high activity.

IT 908250-77-1P 908250-81-7P 908250-97-5P

908251-01-4P 908251-03-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic compds. as activators for peroxisome proliferator-activated receptor $\delta)\,$

RN 908250-77-1 HCAPLUS

CN Propanoic acid, 2-methyl-2-[2-methyl-4-[3-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 908250-81-7 HCAPLUS

CN Acetic acid, [2-methyl-4-[3-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 908250-97-5 HCAPLUS

CN Propanoic acid, 2-methyl-2-[2-methyl-4-[3-[3-(1-methylethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 908251-01-4 HCAPLUS

CN Acetic acid, [2-methyl-4-[3-[3-(1-methylethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 908251-03-6 HCAPLUS

CN Propanoic acid, 2-[4-[3-[3-hexyl-5-(4-methylphenyl)-2-thienyl]-1-oxopropyl]-2-methylphenoxy]-2-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:772794 HCAPLUS Full-text

ACCESSION NUMBER: DOCUMENT NUMBER:

145:369215

TITLE:

Species differences in metabolism and pharmacokinetics of a sphingosine-1-phosphate receptor agonist in rats and dogs: formation of a unique glutathione adduct in

the rat

AUTHOR(S): Anari, M. Reza; Creighton, Mellissa D.; Ngui, Jason

S.; Tschirret-Guth, Richard A.; Teffera, Yohannes; Doss, George A.; Tang, Wei; Yu, Nathan X.; Ciccotto, Suzanne L.; Hobra, Donald F., Jr.; Coleman, John B.;

Vincent, Stella H.; Evans, David C.

CORPORATE SOURCE:

Department of Drug Metabolism, Merck Research

Laboratories, West Point, PA, USA

SOURCE:

Drug Metabolism and Disposition (2006), 34(8),

1367-1375

CODEN: DMDSAI; ISSN: 0090-9556

PUBLISHER:

American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal LANGUAGE: English

The pharmacokinetics and metabolism of 1-(4-((4-phenyl-5-trifluoromethyl-2-AB thienyl)methoxy)benzyl)azetidine-3-carboxylic acid (MRL-A), a selective agonist for the sphingosine-1-phosphate 1 (S1P1) receptor, were investigated in rats and dogs. In both species, more than 50% of the dose was excreted in bile. Specific to the rat, and observed in bile, were a taurine conjugate of MRL-A and a glucuronide conjugate of an azetidine lactam metabolite. In dogs, a smaller portion of the dose (54% of administered dose) was excreted intact in bile, and the major metabolites detected were an azetidine N-oxide of MRL-A and an acylglucuronide of an N-dealkylation product. This latter metabolite was also observed in rat bile. Stereoselective formation of the N-oxide isomer was observed in dogs, whereas the rat produced comparable amts. of both isomers. The formation of a unique glutathione adduct was observed in rat bile, which was proposed to occur via N-dealkylation, followed by reduction of the putative aldehyde product to form the alc., and dehydration of the alc. to generate a reactive quinone methide intermediate. Incubation of a synthetic standard of this alc. in rat microsomes fortified with reduced glutathione or rat hepatocytes resulted in formation of this unique glutathione adduct.

910579-71-4

RL: BSU (Biological study, unclassified); BIOL (Biological study) (species differences in metabolism and pharmacokinetics of a sphingosine-1-phosphate receptor agonist MRL-A in rats and dogs)

RN 910579-71-4 HCAPLUS

Benzoic acid, 4-[[4-phenyl-5-(trifluoromethyl)-2-thienyl]methoxy]- (9CI) CN (CA INDEX NAME)

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 28 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2006:513667 HCAPLUS Full-text ACCESSION NUMBER:

145:27731 DOCUMENT NUMBER:

Preparation of biaryl compounds, particularly TITLE:

N-(biarylpropionyl)anthranilides, as niacin receptor

agonists and pyridoindolizine derivatives as DP

receptor antagonists, their pharmaceutical

compositions and their combination useful for treating

atherosclerosis and dyslipidemias

Colletti, Steven L.; Tata, James R.; Shen, Hong C.; INVENTOR(S):

Ding, Fa-Xiang; Frie, Jessica L.; Imbriglio, Jason E.;

Chen, Weichun

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

PCT Int. Appl., 100 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

.PATENT INFORMATION:

	rent				KIN		DATE			APPL:						ATE	
	2006	•					2006	0601								0051	
WO	2006	0579	22		A3		2006	0831									
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
							NA,										
					RU,			·	·								
PRIORIT	Y APP	•	•	•	•	•				US 2	004-	6302	81P		P 2	0041	123
OTHER S	OURCE	(S):			MAR	PAT	145:	2773	1								
GI		•															

The invention is related to biaryls I [Y = C, N; Z = C(RaRb)n; Ra, Rb =AΒ independently H, alkyl, OH, F, etc.; n = 1-5; R1 = CO2H, 1H-tetrazol-5-yl, CONHSO2Rc; Rc = (un) substituted alkyl, Ph; X10' = (X10)0-1; X1' = (X1)0-1' X1-X10 = C, or a heteroatom selected from O, S, and N, with provisos; each R2 = H, F, Cl, Br, I, alkyl, heterocyclyl, etc.; or two R2 groups taken together can form a fused Ph or fused heterocycle with ring B; each R3 = H, halo, halo/alkyl, halo/alkoxy, etc.; each R4 = H, halo, Me, etc.], as well as pharmaceutically acceptable salts, solvates, as niacin receptor agonists useful for treating atherosclerosis and dyslipidemias in combination with DP antagonists. The invention is also related to the preparation of DP antagonists. Pharmaceutical compns. comprising I are also included. anthranilide II was prepared by Pd-coupling of 3-(4-iodophenyl)propionic acid with phenylboronic acid, chlorination of biaryl propionic acid (no data) with SOC12, and amidation of acyl chloride (no data) with anthranilic acid. I have an EC50 in the functional assay in vitro GTP γ S binding assay within the range of about less than 1 μM to as high as about 100 μM . Have an IC50 in the 3Hnicotinic acid competition binding assay within the range of 1 nM to about 25

 $\mu M.$ Selected I do not exhibit measurable in vivo vasodilation in the murine flushing model at doses up to 100 mg/kg or 300 mg/kg in the presence of DP antagonists.

IT 889360-23-0P 889360-24-1P 889360-31-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(niacin agonist; preparation of biaryl compds. as niacin receptor agonists and pyridoindolizine derivs. as DP receptor antagonists and their combination useful for treating atherosclerosis and dyslipidemias)

RN 889360-23-0 HCAPLUS

CN Benzoic acid, 2-[[3-[5-(4-fluoro-2-methoxyphenyl)-2-thienyl]-1-oxopropyl]amino]- (9CI) (CA INDEX NAME)

RN 889360-24-1 HCAPLUS

CN Benzoic acid, 2-[[3-[5-(2-chloro-4-hydroxyphenyl)-2-thienyl]-1-oxopropyl]amino]- (9CI) (CA INDEX NAME)

RN 889360-31-0 HCAPLUS

CN Benzoic acid, 2-[[1-oxo-3-(5-phenyl-2-thienyl)propyl]amino]- (9CI) (CA INDEX NAME)

Ph
$$CH_2-CH_2-CH_2-C-NH$$

L13 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:469629 HCAPLUS Full-text

DOCUMENT NUMBER:

144:488936

TITLE:

Preparation of amino acid aryl or heteroaryl

derivatives as glycogen phosphorylase inhibitors

INVENTOR(S):

Evans, Karen; Cichy-Knight, Maria; Coppo, Frank Teen; Dwornik, Kate Ann; Gale, Jennifer Paul; Garrido, Dulce Maria; Li, Yue Hu; Patel, Mehul P.; Tavares, Francis X.; Thomson, Stephen Andrew; Dickerson, Scott Howard; Peat, Andrew James; Sparks, Steven Meagher; Banker,

Pierette; Cooper, Joel P.

PATENT ASSIGNEE(S):

Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 681 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

(CA INDEX NAME)

PATENT INFORMATION:

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PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                                            WO 2005-US39956
    WO 2006052722
                         A1
                                20060518
                                                                   20051104
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
            MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                                            US 2004-626389P
                                                                P 20041109
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                         MARPAT 144:488936
     The invention relates to compds. R-Ar-NR1CO-X-Ar' [R is CO2H or carbamoyl
AB
     which may be substituted by alkyl, aryl, carboxyalkyl, etc.; Ar is an
     aromatic, heteroarom., cycloaliph. or heterocyclic ring which may fused to an
     aromatic or heteroarom. ring; X is carbon, nitrogen, oxygen or sulfur; Ar' is
     an aromatic or heteroarom. ring; R1 is H or alkyl] or their pharmaceutically-
     acceptables salts, which are inhibitors of glycogen phosphorylase and can be
     used to treat diabetes, conditions associated with diabetes, or tissue
     ischemia, including myocardial ischemia. Thus, N-[3-[[[(2,6-
     dimethylphenyl)amino]carbonyl]amino]-2-naphthoyl]-L-aspartic acid was prepared
     by treating L-Asp(tBu)-Wang Resin with 3-amino-2-naphthalenecarboxylic acid
     and then 2,6-dimethylphenyl isocyanate. The product showed IC50 = 0.46 \mu M for
     inhibition of glycogen phosphorylase.
     887241-67-0P 887241-68-1P 887241-69-2P
TΤ
     887241-70-5P 887241-71-6P 887241-72-7P
     887242-52-6P 887242-53-7P 887242-54-8P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of amino acid aryl or heteroaryl derivs. as glycogen
        phosphorylase inhibitors)
     887241-67-0 HCAPLUS
RN
     Cyclopropanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-
CN
```

trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI)

RN 887241-68-1 HCAPLUS

CN Cyclobutanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887241-69-2 HCAPLUS

CN Cyclopentanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887241-71-6 HCAPLUS

CN Cycloheptanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887241-72-7 HCAPLUS

CN Cyclooctanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887242-52-6 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[[[5-(4-chlorophenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887242-53-7 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[[[5-(3,4-difluorophenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

CN Cyclohexanecarboxylic acid, 1-[[[5-(3,4,5-trifluorophenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:1290198 HCAPLUS Full-text

ACCESSION NUMBER:
DOCUMENT NUMBER:

144:36347

TITLE:

Preparation of triazoles as modulators of peroxisome

proliferator activated receptors (PPAR).

INVENTOR(S):

Zhu, Yan; Ma, Jingyuan; Cheng, Peng; Zhao, Zuchun;

Gregoire, Francine M.; Rakhmanova, Vera A.

PATENT ASSIGNEE(S):

SOURCE:

Metabolex, Inc., USA

PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAS	rent	NO.								APPL		-				ATE	
						-										2050	
-	2005									WO 2	005-	0518	318		21	0050	3 24
WO	2005																
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	ΚP,	KR,	ΚZ,
							LU,										
		NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
			ZM,														
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
							RU,										
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		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,
		MR,	NE,	SN,	TD,	TG											
ΑU	2005	2474	73		A1		2005	1208		AU 2	005-	2474	73		2	0050	524
CA	2567	437			A1		2005	1208		CA 2	005-	2567	437		2	0050	524
	2006									US 2						0050	524
	1751						2007									0050	
							CZ.									HU,	ΙĒ,

IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,

HR, LV, MK, YU PRIORITY APPLN. INFO.:

US 2004-574426P

P 20040525

OMURD COURCE (C)

WO 2005-US18318

W 20050524

OTHER SOURCE(S):

MARPAT 144:36347

GΙ

Title compds. [I; Arl = (substituted) Ph, naphthyl, imidazolyl, AΒ benzimidazolyl, pyrrolyl, indolyl, thienyl, benzothienyl, furyl, benzofuryl, benzodioxolyl; Ar2 = (substituted) Ph, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, triazinyl; L = specified linker having 1-6 chain atoms; K = bond, specified linker having 1-6 chain atoms; R1 = H, halo, alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl; Z = CH2OR6, CO2R6, tetrazol-5-yl, CONHSO2R2, CHO; R2 = H, alkyl, haloalkyl, aryl, aralkyl, heteroaryl, etc.; R6 = H, alkyl, haloalkyl, alkenyl, cycloalkyl, heterocyclyl, aralkyl, aralkenyl, etc.; with provisos], were prepared I are useful in treatment of type 2 diabetes, hyperinsulemia, hyperlipidemia, hyperuricemia, hypercholesteremia, atherosclerosis, cardiovascular disease, Syndrome X, hypertriglyceridemia, hyperglycemia, obesity, and eating disorders. Thus, 2-methyl-2-[2-methyl-4-[5-methyl-2-(4trifluoromethylphenyl)-2H-1,2,3- triazol-4-ylmethylsulfanyl]phenoxy]propionic acid (multistep preparation given) showed EC50 \leq 10 μM in a PPAR α and PPAR δ transactivation assay.

IT 870885-42-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of triazoles as modulators of peroxisome proliferator activated receptors)

RN 870885-42-0 HCAPLUS

CN Acetic acid, [4-[[[5-[[4-(4-methoxyphenyl)-1-piperazinyl]methyl]-2-[4-(2-thienyl)phenyl]-2H-1,2,3-triazol-4-yl]methyl]thio]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

L13 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:962237 HCAPLUS Full-text

DOCUMENT NUMBER:

143:266806

TITLE:

INVENTOR(S):

Preparation of N-substituted (hetero)aryl,

particularly furan-2-yl, carboxamides and related compounds as prostanoid EP2 receptor agonists Oxford, Alexander William; Davis, Richard Jon;

Coleman, Robert Alexander; Clark, Kenneth Lyle; Clark, David Edward; Harris, Neil Victor; Fenton, Garry; Hynd, George; Stuttle, Keith Alfred James; Sutton, Jonathan Mark; Ashton, Mark Richard; Boyd, Edward

Andrew; Brunton, Shirley Ann

PATENT ASSIGNEE(S):

Pharmagene Laboratories Limited, UK

SOURCE:

PCT Int. Appl., 238 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P.F	TENT	NO.			KIN) i	DATE		i						Dž	ATE	
WC	2005	0803	67		A1	- :	2005	0901	1			GB46			20	0050	211
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
										RU,							
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
		MR,	NE,	SN,	TD,	TG											
US	2005	2561	70		A1		2005	1117		US 2	005-	5572	4		2	0050	211
EI	1723	132			A1		2006	1122		EP 2	005-	7082	87		2	0050	211
	R:	AT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR		
PRIORI	Y APP	LN.	INFO	.:						US 2	004-	5435	38P		P 2	0040	212
										US 2	004-	6269	40P		P 2	0041	112
										WO 2	005-	GB46	2	1	W 2	0050	211
		(0)			147 D	D 70 M	1 4 2	200	0.0								

OTHER SOURCE(S):

MARPAT 143:266806

GΙ

$$R^4$$
 R^3
 R^1
 Y
 R^2
 Y

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

Title compds. of formula R5-A-D-(CH2)n-B (I) [R5 = (un)substituted aryl,AB alkyl; A = (un) substituted 1,4-phenylene, 1,3-phenylene, 1,6-pyridinylene, 1,5-furanylene, etc.; D = CONH and derivs., NHCO and derivs., COCH2, etc.; B = (un) substituted Ph, 2-naphthyl, 5-benzofuran-2-yl, etc.; n = 0-1] their salts, solvates, and chemical protected forms, particularly N-substituted furan carboxamides II [X = (CH2)n; Y = (CH2)m; n = 0-1; m = 0-3; (m + n) = 0-4; R1 =(un) substituted Ph, benzodioxol-5-yl, adamant-1-yl, etc.; R2 = CO2H, CONH2, CH2OH, tetrazol-5-yl; R3, R4 = independently H, (un)substituted alkyl, aryl, etc.; R' = H, (un) substituted alkyl], were prepared as EP2 receptor agonists. Thus, amination of 5-bromo-2-furoic acid with 3-aminophenylacetic acid Et ester (preparation given), Pd-coupling with 4-methoxyphenylboronic acid, and saponification of the ester gave amide III. III displayed a pKi value of > 5 M for binding to human EP2 receptor. Selected I were EP2 agonists/EP4 antagonists.

863702-77-6P, [3-[[(5-Phenylthien-2-yl)carbonyl]amino]phenyl]aceti ፐጥ c acid 863702-98-1P, [3-[[(4-Methyl-5-phenylthien-2yl)carbonyl]amino]phenyl]acetic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

> (drug candidate; preparation of N-substituted (hetero)aryl, particularly furan-2-vl, carboxamides and related compds. as prostanoid EP2 receptor agonists)

RN 863702-77-6 HCAPLUS

(Uses)

Benzeneacetic acid, 3-[[(5-phenyl-2-thienyl)carbonyl]amino]- (9CI) CN

863702-98-1 HCAPLUS RN

Benzeneacetic acid, 3-[[(4-methyl-5-phenyl-2-thienyl)carbonyl]amino]-CN (CA INDEX NAME)

REFERENCE COUNT:

INVENTOR(S):

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2005:904352 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 143:248386

Preparation of substituted azole derivatives for TITLE: treating diseases mediated by PTPase activity

Mjalli, Adnan M. M.; Polisetti, Dharma R.;

Subramanian, Govindan; Quada, James C.; Arimilli, Murty N.; Yarragunta, Ravindra R.; Andrews, Robert C.; Xie, Rongyuan

PATENT ASSIGNEE(S):

USA

SOURCE:

GI.

U.S. Pat. Appl. Publ., 204 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

			APPLICATION NO	
US 2005187277			US 2005-56498	
AU 2005214349	A1	20050901	AU 2005-214349	20050211
			CA 2005-255190	
WO 2005080346			WO 2005-US4590	
=			BA, BB, BG, BR, BI	
			DM, DZ, EC, EE, E	
			IN, IS, JP, KE, KO	
			MD, MG, MK, MN, M	
			RO, RU, SC, SD, SI	
				N, YU, ZA, ZM, ZW
			NA, SD, SL, SZ, T	
			TM, AT, BE, BG, C	
			IE, IS, IT, LT, L	
			CF, CG, CI, CM, G	
			CF, CG, CT, CM, G	1, 611, 62, 611, 112,
	S, SN, TD,		EP 2005-723026	. 20050211
EP 1/30118	AT	Z0001Z13	EF 2003-723020	D CD CD UII TE
				R, GB, GR, HU, IE,
		LU, MC, NL,	PL, PT, RO, SE, S	1, 5K, 1K, AL, BA,
	, MK, YU		CV 0005 000040	60 20050211
			CN 2005-800048	60 20050211
PRIORITY APPLN. IN	·	•		P P 20040212
		•		W 20050211
OTHER SOURCE(S):	MARP	PAT 143:2483	86	

The title compds. I [a, b = 0-2; W = 0, S, NR2 (wherein R2 = alkyl, etc.); R1 AΒ = H, halo, CN, etc.; L1 = a direct bond, (un) substituted NHCO, NHSO2, etc.; Ar1 = (un)substituted (hetero)aryl, fused cycloalkylaryl, etc.; Ar2 = (un) substituted (hetero) arylene, fused arylcycloalkylene, etc.; L2 = CH2, O, alkylene, etc.] which can be useful as inhibitors of protein tyrosine phosphatases and thus can be useful for the management, treatment, control, or the adjunct treatment of diseases mediated by PTPase activity such as type I diabetes and type II diabetes, were prepared Thus, treating 4-(2,4dichlorophenyl)-2-[2-(4-methoxyphenyl)-(E)-vinyl]-1H- imidazole with Me bromoacetate followed by ester hydrolysis afforded 56% {4-(2,4dichlorophenyl)-2-[2-(4-methoxyphenyl)-(E)-vinyl]-1H-imidazol-1- yl}acetic acid. The representative compds. I were tested for inhibition of PTP-1B. In

general, the exemplified compds. I may inhibit PTP-1B with IC50 of less than 20 μ M. The pharmaceutical compns. comprising the compds. I, and their use in treating human or animal disorders are also disclosed.

IT 863245-14-1P 863245-23-2P 863245-65-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted azole derivs. for treating diseases mediated by PTPase activity)

RN 863245-14-1 HCAPLUS

CN Benzoic acid, 4-[[2-[(1E)-2-[4-(5-chloro-2-thienyl)phenyl]ethenyl]-4-(2,4-dichlorophenyl)-1H-imidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 863245-23-2 HCAPLUS

CN Benzoic acid, 4-[[2-[(1E)-2-[4-(5-acetyl-2-thienyl)phenyl]ethenyl]-4-(2,4-dichlorophenyl)-1H-imidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 863245-65-2 HCAPLUS

CN Glycine, N-[4-[[2-[(1E)-2-[4-(5-acetyl-2-thienyl)phenyl]ethenyl]-4-(2,4-dichlorophenyl)-1H-imidazol-1-yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L13 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:283476 HCAPLUS Full-text

DOCUMENT NUMBER:

142:355258

TITLE:

Preparation of azole compounds containing phenylacetic

acid moiety as PPAR δ agonists

INVENTOR(S):

Kusuda, Shinya; Nakayama, Yoshisuke; Tajima, Hisao;

Sakamoto, Takahiko

PATENT ASSIGNEE(S):

Ono Pharmaceutical Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 81 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D	DATE		į		ICAT:				D.	ATE		
WO	2005	0284	53		A1	-	2005	0331	. 1						2	0040	921	
	W:	ΑĖ,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
											EC,							
											JP,							
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
											SC,							
											UZ,							
	. RW:										SL,							
											BE,							
											LU,							
											GA,							
			TD,		•		•	•	•									
AU	2004	2743	37 ·		A1		2005	0331		AU 2	004-	2743	37		2	0040	921	
	2539						2005				004-							
EP	1666	472								EP 2	004-	7734	49		2	0040	921	
	R:	AT,									IT,							
											HU,							
BR	2004										004-				2	0040	921	
CN	1882	553			Α		2006	1220		CN 2	004-	8003	3842		2	0040	921	
NO	2006	0012	81		Α		2006	0622		NO 2	006-	1281			2	0060	321	
RIT	Y APP	LN.	INFO	. :						JP 2	003-	3306	16	i	A 2	0030	922	
										JP 2	2004-	2315	46	i	A 2	0040	806	
										WO 2	2004-	JP14	137	1	₩ 2	0040	921	
n c	TIDOE	101.			MAD	ייתם	1/2.	3552	50									

OTHER SOURCE(S): MARPAT 142:355258

GI

$$F3C \xrightarrow{N} \stackrel{N}{\underset{S}{\bigvee}_{Me}} OH$$

Title compds. I [R1, R2 = H, alkyl, etc.; R3 = optionally substituted alkyl with halo, etc.; R4 = H, alkyl; R5, R6 = H, alkyl; further detail on R5, R6 is provided.; X = S, O, etc.; ring A = optionally substituted cyclic group] were prepared For example, reaction of compound II, e.g., prepared from 4- (trifluoromethyl)piperidine·HCl in 5 steps, with 2-fluoro-3- hydroxyphenylacetic acid Me ester under Mitsunobu condition followed by hydrolysis using aqueous NaOH afforded compound III. The exemplified compound III exhibited 1.23 fold increase for PPAR δ at 1.0 μ M. Compds. I are claimed useful as PPAR δ agonists for the treatment of hyperlipidemia, obesity. Formulations are given.

Ι

IT 848943-73-7P 848943-74-8P 848943-77-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azole compds. containing phenylacetic acid moiety as PPAR agonists for treatment of hyperlipidemia, obesity)

RN 848943-73-7 HCAPLUS

CN Benzeneacetic acid, 4-methyl-3-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 848943-74-8 HCAPLUS

CN Benzeneacetic acid, 4-methyl-3-[2-[5-methyl-2-[4-(3-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 848943-77-1 HCAPLUS

CN Benzeneacetic acid, 4-methyl-3-[2-[5-(1-methylethyl)-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:116569 HCAPLUS Full-text

DOCUMENT NUMBER: 142:207534

TITLE: High-sensitive electrophotographic photoreceptor for

positive charging

INVENTOR(S): Kuroda, Masami; Sekine, Nobuyuki; Kotani, Noriko;

Okura, Kenichi; Takeshima, Motohiro

PATENT ASSIGNEE(S): Fuji Electric Imaging Device Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005037476 PRIORITY APPLN. INFO.:	A	20050210	JP 2003-197697 JP 2003-197697	20030716 20030716
OTHER SOURCE(S):	MARPAT	142:207534		

AB The photoreceptor has a light-sensitive layer containing a charge generating substance and a charge transporting substance I [R1-3 = H, halo, (substituted) C1-8 alkyl, (substituted) aryl; R4 = H, C1-8 alkyl; X = S, O; n = 1-3] with electron transportability on an elec. conducting support.

IT 839717-34-9

RL: DEV (Device component use); USES (Uses) (electrophotog. photoreceptor containing tetracyano indene compound electron-transporting agent)

RN 839717-34-9 HCAPLUS

Propanedinitrile, 2,2'-[2-[[5-(3,5-dichlorophenyl)-2-thienyl]methylene]-1H-CN indene-1,3(2H)-divlidene]bis- (9CI) (CA INDEX NAME)

L13 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2005:34105 HCAPLUS Full-text

ACCESSION NUMBER:

142:138304 DOCUMENT NUMBER:

Semiconductor for photoelectric conversion material, TITLE:

photoelectric converter, and photoelectrochem. cell

Ofuku, Koji; Kagawa, Nobuaki; Tanaka, Tatsuo INVENTOR(S):

Konica Minolta Holdings, Inc., Japan PATENT ASSIGNEE(S):

SOURCE:

Jpn. Kokai Tokkyo Koho, 64 pp. CODEN: JKXXAF

Patent DOCUMENT TYPE: Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE _____ 20040423 20050113 JP 2004-127878 JP 2005011800 Α JP 2003-147449 A 20030526 PRIORITY APPLN. INFO.:

The semiconductor contains a compound of the structure Cp=[L1-AB L2]m=L3(Ar2)nAr1NR1R2 [Ar1, Ar2 = a five- or six-membered aromatic ring or heterocyclic ring; Cp = an atomic group rendering the compound absorbing in visible and near IR range with ≥1 substitutable carboxyl group; R1, R2 = H, (substituted) aliphatic, (substituted) aromatic, or (substituted) heterocyclic group; R1 and R2, R1 and Ar1, or R2 and Ar3 may bond to form a N containing heterocyclic ring; L1-L3 = (substituted) methine group; m = integer 0-2; and n = integer 1-4] adsorbed onto its surface. The photoelec. converter has the above semiconductor on a conductive support. The photoelectrochem. cell has the photoelec. converter, a charge transporting layer, and a counter electrode.

827021-30-7 IT

RL: MOA (Modifier or additive use); USES (Uses)

(pigment sensitizers for metal oxide or metal sulfide semiconductors for photoelec. converters and photoelectrochem. cells)

827021-30-7 HCAPLUS RN

1,3-Benzenedicarboxylic acid, 5-[[1-cyano-2-[[5-[2-methyl-4-(1-CN

piperidinyl)phenyl]-2-thienyl]methylene]-3-oxobutylidene]amino]- (9CI)
(CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} & \text{O} \\
 & \text{N} & \text{CH} & \text{CO2H} \\
\end{array}$$

L13 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:963142 HCAPLUS Full-text

DOCUMENT NUMBER:

141:388701

TITLE:

Benzoic acid derivatives and factor VII inhibitors

containing them

INVENTOR(S):

Ishihara, Tsukasa; Miura, Tadanori; Koike, Takanori;

Seki, Norio; Hirayama, Fukushi; Shigenaga, Kenshi

PATENT ASSIGNEE(S):

Yamanouchi Pharmaceutical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 45 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO:	DATE
JP 2004315395 'PRIORITY APPLN. INFO.: OTHER SOURCE(S): GI	A	20041111	JP 2003-109424	20030414
	MARPAT	141:388701	JP 2003-109424	20030414

$$R1$$
 $R5$
 $C02R7$
 $R4$
 $R6$
 $R2$
 $R3$
 $R4$

The derivs. I [ring A = benzene, thiophene, 6-membered ring having 1-4 N atom(s); R1 = CONH2, CH2NH2; R2-R4 = H, lower alkyl(oxy), OH, halo, lower haloalkyl(oxy), NH2, NO2, cyano, lower alkylamino, di(lower alkyl)amino, cycloalkylamino, cycloalkylakylamino; R5 = NR8COR9, CONR1OR11; R6-R8 = H, lower alkyl; R9-R11 = H, (un)substituted alkyl(oxy), (un)substituted cycloalkyl, (un)substituted aryl, (un)substituted heterocyclyl having 1-4 N, S, O; R3 and R4 may be bonded together to form CH:CHCH:CH, OCH2CH2O, OCH2O; NR1OR11 may be (un)substituted heterocyclyl] or their salts are claimed. Blood coagulation factor VII inhibitors containing I or their salts are also claimed. Thus, preparation of 2'-[[4-(aminomethyl)phenyl]amino]carbo nyl]-4-

PATENT INFORMATION:

PA?	PATENT NO. WO 2004063190					D	DATE		1	APPL	ICAT	ION I	NO.		D	ATE		
WO	2004	0631	90		A1		2004	 0729	1	WO 2	003-	US41	690		2	0031	231	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	•	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	·BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
•••	2510						2004											
AU	2003																	
EP	1581	521			A1		2005	1005		EP 2	003-	8086	24		2	0031	231	
	R:						ES,										PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
	2006						2006								2		-	
บร	2006	2173	74		A1		2006	0928										
PRIORIT	Y APP	LN.	ĪÑFO	.:						US 2	003-	4385	41P		P 2	0030	106	
									1	WO 2	003-	US41	690	1	W 2	0031	231	
OTHER SO	OURCE	(S):			MAR	PAT	141:	1404	30			1						

GΙ

Title compds. I (wherein A = carboxy(alkyl), tetrazolyl(alkyl), AB nitrilo(alkyl), carboxamido(alkyl), sulfonamido(alkyl); E = (un)substituted (CH2)0-1A; T = (un) substituted specified heterocyclyl, (hetero)aryl; U =(un) substituted aliphatic linker wherein one C of the linker may be replaced with O, NH, or S; X = a bond, O, S, SO2, NH; Y = a bond, CH2, O, S, NH; Z1 =H, Z3(alkyl)Z4; Z2 = NH, S, O, with provisos; Z3 = a bond, CO, CO2, CONZ5, SO2; Z4 = (un) substituted (hetero) aryl; Z5 = H, (un) substituted (hetero) aryl; R2 = absent, (hetero)alkyl; R8 = H, alkyl, alkylenyl, oxo, sulfo, halo; R9 = H, alkyl, alkylenyl, halo, allyl, oxo, sulfo, OH, alkoxy, (un)substituted aryl(alkyl), heteroaryl; or R8 and R9 may combine to form a fused ring; R33 = alkyl, (un) substituted alkoxy, Ph, thienyl, pyridyl, piperidinyl, morpholinyl, tetrahydropyranyl; n = 1-3; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators (no data). For example, 5chloromethyl-4-isopropyl-2-(4- trifluoromethylphenyl)thiazole was coupled with

ΙI

(6-hydroxybenzo[b]thiophen- 3-yl)acetic acid Et ester in the presence of Cs2CO3 in acetonitrile to give II. I and their pharmaceutical compns. are expected to be effective in treating and preventing Syndrome X, Type II diabetes, and atherosclerosis (no data).

IT 476154-35-5P, 3-[2-Methyl-4-[[3-methyl-5-(4-

trifluoromethylphenyl)thiophen-2-yl]methoxy]phenyl]propionic acid
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(intermediate; preparation of fused heterocyclic derivs. as PPAR modulators for treatment of diabetes mellitus, syndrome X, and related disorders) 476154-35-5 HCAPLUS

Benzenepropanoic acid, 2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

L13 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:606460 HCAPLUS Full-text

DOCUMENT NUMBER:

141:157025

TITLE:

RN

CN

Preparation of thiophenes as PPAR modulators for treatment of diabetes mellitus, cardiovascular

diseases, inflammatory diseases, and related disorders

Mantlo, Nathan Bryan; Wang, Xiaodong; Zhu, Guoxin

INVENTOR(S):

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 137 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.					D	DATE			APPL:	ICAT:	I NOI	NO.		DZ	ATE		
 WO	2004		9.4		 Δ1	-	2004	0729		 γο 21	003-1	US39:	 118		20	0031	231	
WO																		
	W:		AG,															
			CO,															
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LR,															
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ТG
AU	2003	2964	02		A1		2004	0810		AU 2	003-	2964	02		2	0031	231	
EP	1583																	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	ÇZ,	EE,	ΗU,	SK		
US	2006	0947	68		A1		2006	0504		US 2	005-	5403	<u>3</u> 0		2	0050	621	
PRIORITY												4385						

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OTHER SOURCE(S): GT

MARPAT 141:157025

Title compds. I [wherein R1 = H, (un)substituted alkyl, alkenyl, AB (hetero)aryl(alkyl), arylheteroalkyl, cycloalkylaryl(alkyl); R8 = H, alkyl, alkylenyl, halo; R9 = H, (un)substituted alkyl, alkylenyl, halo, arylalkyl, heteroaryl, allyl, alkoxy, etc.; R10, R11 = independently H, OH, CN, NO2, halo, oxo, (un) substituted (halo) alkyl, alkoxy, cycloalkyl, (hetero)aryl(alkyl), cycloalkylaryl(alkyl), aryloxy, acyl, carboxy, amino, sulfamov1, etc.; E = (un) substituted carboxy (methy1), tetrazolyl (methy1), nitriloalkyl, carboxamido(methyl), sulfonamido(methyl); U = (un) substitutedaliphatic linker wherein one C of the linker is optionally replaced with O, NH, or S; X = bond, O, S, SO2, NH; Y = bond, CH2, NH; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators (no data). For example, coupling of 2-chloromethyl-5-(4trifluoromethylphenyl)thiophene with 3-(4-hydroxy-2-methylphenyl)propionic acid Me ester in the presence of Cs2CO3 in acetonitrile, followed by saponification with NaOH in THF and MeOH provided II. I and their pharmaceutical compns. are expected to be effective in treating and preventing diabetes mellitus, cardiovascular disorders, inflammatory conditions, and other disorders (no data).

476154-35-5P, 3-[2-Methyl-4-[[3-methyl-5-(4-ΙT trifluoromethylphenyl)thien-2-yl]methoxy]phenyl]propionic acid 728038-74-2P, 3-[2-Methyl-4-[[5-(4-trifluoromethylphenyl)thien-2yl]methoxy]phenyl]propionic acid 728038-76-4P, [2-Methyl-4-[[5-(4-trifluoromethylphenyl)thien-2-yl]methoxy] phenoxy] a ceticacid 728038-77-5P, 3-[2-Methyl-4-[[3-phenyl-5-(4trifluoromethylphenyl)thien-2-yl]methoxy]phenyl]propionic acid 728038-78-6P, 3-[4-[[3,5-Bis(4-trifluoromethylphenyl)thien-2yl]methoxy]-2-methylphenyl]propionic acid 728038-79-7P, 3-[2-Methyl-4-[1-[5-(4-trifluoromethylphenyl)thien-2yl]propoxy]phenyl]propionic acid 728038-80-0P, 3-[2-Methyl-4-[1-[5-(4-trifluoromethylphenyl)thien-2yl]butoxy]phenyl]propionic acid 728038-81-1P, 3-[2-Methyl-4-[2-methyl-1-[5-(4-trifluoromethylphenyl)thien-2yl]propoxy]phenyl]propionic acid 728038-82-2P, 3-[2-Methyl-4-[1-[5-(4-trifluoromethylphenyl)thien-2-yl]-2phenylethoxy]phenyl]propionic acid 728038-84-4P,

3-[4-[[1-[3-(2-Hydroxyethyl)]-5-(4-trifluoromethylphenyl)]thien-2yl]ethyl]sulfanyl]-2-methylphenyl]propionic acid 728038-85-5P, 2-Methoxy-3-[4-[2-[3-methyl-5-(4-trifluoromethylphenyl)thien-2yl]propoxy]phenyl]propionic acid 728038-86-6P 728038-87-7P, (R) -[2-Methyl-4-[[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenoxy]acetic acid 728038-88-8P, (S) -[2-Methyl-4-[[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-ylpropyl]sulfanylphenoxy]acetic acid 728038-89-9P, 3-[2-Methyl-4-[[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenyl]propionic acid 728038-90-2P, [3-[2-[3-Methyl-5-(4-trifluoromethylphenyl)thien-2yl]propoxy]phenyl]acetic acid 728038-93-5P, 3-[2-Methyl-4-[1-[3methyl-5-(4-trifluoromethylphenyl)thien-2-yl]propoxy]phenyl]propionic acid 728038-95-7P, (R) -3-[2-Methyl-4-[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propoxy]phenyl]propionic acid 728038-96-8P, [2-Methyl-4-[[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenoxy]acetic acid 728038-97-9P, 3-[2-Methyl-4-[1-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]butoxy]phenyl]propionic acid 728038-98-0P, 3-[2-Methyl-4-[2-methyl-1-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propoxy]phenyl]propionic acid 728038-99-1P, 3-[2-Methyl-4-[1-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]-2-phenylethoxy]phenyl]propionic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (PPAR modulator; preparation of thiophenes as PPAR modulators for treatment of diabetes mellitus, cardiovascular diseases, inflammatory diseases, and other disorders) 476154-35-5 HCAPLUS Benzenepropanoic acid, 2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN

CN

RN 728038-74-2 HCAPLUS
CN Benzenepropanoic acid, 2-methyl-4-[[5-[4-(trifluoromethyl)phenyl]-2thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 728038-76-4 HCAPLUS
CN Acetic acid, [2-methyl-4-[[5-[4-(trifluoromethyl)phenyl]-2thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 728038-77-5 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[[3-phenyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-CH_2-CO_2H$$

RN 728038-78-6 HCAPLUS

CN Benzenepropanoic acid, 4-[[3,5-bis[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]-2-methyl- (9CI) (CA INDEX NAME)

RN 728038-79-7 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

F3C
$$S$$
 $CH_2-CH_2-CO_2H$

RN 728038-80-0 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]butoxy]- (9CI) (CA INDEX NAME)

F3C
$$n-Pr$$
 $CH_2-CH_2-CO_2H$

RN 728038-81-1 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-methyl-1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-82-2 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-phenyl-1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 728038-84-4 HCAPLUS

CN Benzenepropanoic acid, 4-[[1-[3-(2-hydroxyethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]thio]-2-methyl-(9CI) (CA INDEX NAME)

RN 728038-85-5 HCAPLUS

CN Benzenepropanoic acid, α -methoxy-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-86-6 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- α -phenoxy-(9CI) (CA INDEX NAME)

RN 728038-87-7 HCAPLUS

CN Acetic acid, [2-methyl-4-[[(2R)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 728038-88-8 HCAPLUS

CN Acetic acid, [2-methyl-4-[[(2S)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.;

RN 728038-89-9 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]- (9CI) (CA INDEX NAME)

RN 728038-90-2 HCAPLUS

CN Benzeneacetic acid, 3-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-93-5 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-95-7 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[(2R)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 728038-96-8 HCAPLUS

CN Acetic acid, [2-methyl-4-[[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

metalloproteinase MMP-12 inhibitors, as well as their pharmaceutical compositions for treating respiratory

diseases

INVENTOR(S):

Dublanchet, Anne-Claude; Compere, Delphine; Cluzeau,

WO 2003-EP8750 W 20030807

Philippe; Blais, Stephane

PATENT ASSIGNEE(S):

Warner-Lambert Company LLC, USA

SOURCE:

Eur. Pat. Appl., 111 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	CENT 1	NO.			KIN)	DATE		į			ION I			D	ATE	
EP	1394	 159			A1	-	2004	0303							2	0020	313
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
							RO,										
CA	2497				A1		2004	0304	4	CA 2	003-	2497	632		2	0030	807
WO	2004	0184	48		A1		2004	0304	1	WO 2	003-1	EP87	50		2	0030	B07
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
							DK,										
							IN,										
							MD,										
							RU,										
							US,										
	RW:	GH,														ΑZ,	BY,
							TM,										
							ΙE,										
							CM,										
AU	2003				A1		2004										
EP	1534	700			A1		2005	0601		EP 2	003-	7922	70		2	0030	807
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
BR	2003						2005										807
JP	2006	5046	74		\mathbf{T}		2006	0209		JP 2	004-	5300	99		2	0030	807
US	2004	0728	71		A1		2004	0415		US 2	003-	6380	16 -		2	0030	808
	Y APP									EP 2	002-	2920	37		A 2	0020	813
										T.7.O. O.	000	2007	EΛ	,	ra o	0030	007

OTHER SOURCE(S):

MARPAT 140:217508

GI

Title compds. I [wherein X = O or S; Y = O, NH and derivs.; Ra = H, halo, AΒ alkyl, hydroxy, alkoxy; Rb = H, halo, alkyl; A = Ph, cycloakyl, cycloalkenyl; R1, R2 = independently H, halo, CN, NO2, haloalkyl, haloalkoxy, alk(en/yn)yl, OH and derivs., NH2 and derivs., S(0)nH and derivs., CO2H and derivs., CONH2 and derivs., NHSO2H and derivs., etc.; n = 0-2; R3 = H, alkyl, (un) substituted cycloalkyl aryl, heterocyclyl, etc.; and their isomers, pharmaceutically acceptable salts of addition with an acid or base] were prepared as metalloproteinase MMP-12 inhibitors for treating respiratory diseases. For example, II was prepared, in 3 steps, by oxidation of 4-bromothiophene-2carboxaldehyde, acylation of 2-morpholin-4- ylethanamine with thiophene carboxylic acid, followed by Pd-cross coupling of the bromothiophene intermediate with (4-isopropylphenyl)boronic acid. I selectively inhibited MMP-12 in vitro with an IC50 value < 5 μM . Thus, I and their formulations are useful for treating obstructive pulmonary diseases, emphysema, asthma, chronic bronchitis, etc.

IT 666721-54-6P 666721-58-0P, 3-[4-[[[4-(4-Trifluoromethoxyphenyl)thien-2-yl]carbonyl]amino]phenyl]propanoic acid 666721-76-2P, [4-[[[4-(4-tert-Butylphenyl)thien-2-yl]carbonyl]amino]phenyl]acetic acid 666721-78-4P, [4-[[[4-(4-Trifluoromethoxyphenyl)thien-2-yl]carbonyl]amino]phenyl]acetic acid 666721-80-8P, [4-[[[4-(4-Methylthiophenyl)thien-2-yl]carbonyl]amino]phenyl]acetic acid 666721-84-2P, [4-[[[4-(4-Methoxyphenyl)thien-2-yl]carbonyl]amino]phenyl]acetic acid 666722-03-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MMP-12 inhibitor; preparation of thiophenes as selective MMP-12 inhibitors,

for treating pulmonary diseases)

RN 666721-54-6 HCAPLUS

CN 2-Propenoic acid, 3-[4-[[[4-[4-(trifluoromethoxy)phenyl]-2-thienyl]carbonyl]amino]phenyl]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 666721-58-0 HCAPLUS

CN Benzenepropanoic acid, 4-[[[4-[4-(trifluoromethoxy)phenyl]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 666721-76-2 HCAPLUS

CN Benzeneacetic acid, 4-[[[4-[4-(1,1-dimethylethyl)phenyl]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 666721-78-4 HCAPLUS

CN Benzeneacetic acid, 4-[[[4-[4-(trifluoromethoxy)phenyl]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 666721-80-8 HCAPLUS
CN Benzeneacetic acid, 4-[[[4-[4-(methylthio)phenyl]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 666722-03-8 HCAPLUS
CN Cyclohexaneacetic acid, 4-[[[4-[4-(trifluoromethoxy)phenyl]-2-thienyl]carbonyl]amino]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:56568 HCAPLUS Full-text

DOCUMENT NUMBER: 140:402224

TITLE: Detergents profoundly affect inhibitor potencies

against both cyclo-oxygenase isoforms

AUTHOR(S): Ouellet, Marc; Falgueyret, Jean-Pierre; Percival, M.

David

CORPORATE SOURCE: Department of Biochemistry and Molecular Biology,

Merck Frosst Centre for Therapeutic Research,

Pointe-Claire-Dorval, QC, 1005, Can.

SOURCE: Biochemical Journal (2004), 377(3), 675-684

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

The sensitivity of Coxs (cyclo-oxygenases) to inhibition is known to be highly AΒ dependent on assay conditions. In the present study, the inhibitor sensitivities of purified Cox-1 and -2 were determined in a colorimetric assay using the reducing agent N,N,N',N'-tetramethyl-p-phenylenediamine (TMPD). With the detergent genapol X-100 (2 mM) present, the potencies of nimesulide, ibuprofen, flufenamic acid, niflumic acid and naproxen were increased over 100-fold against Cox-2 and titration curve shapes changed, so that maximal inhibition now approached 100%. Indomethacin, diclofenac and flosulide were not changed in potency. Similar effects of genapol were observed with inhibitors of Cox-1. DuP-697 and two analogs became more than 10-fold less potent against Cox-2 with genapol present. Tween-20, Triton X-100 and phosphatidylcholine, but not octylglucoside, gave qual. similar effects as genapol. Similar detergent-dependent changes in inhibitor potency were also observed using a [14C]arachidonic acid HPLC assay. The increases in potency of ibuprofen, flufenamic acid, isoxicam and niflumic acid towards Cox-2 and ibuprofen towards Cox-1 were accompanied by a change from time-independent to time-dependent inhibition. The interactions of Cox inhibitors has been described in terms of multiple binding step mechanisms. The genapol-dependent increase in inhibitor potency for ketoprofen was associated with an increase in the rate constant for the conversion of the initial enzyme-inhibitor complex to a second, more tightly bound form. The loss of potency for some inhibitors is probably due to inhibitor partitioning into detergent micelles. The present study identifies detergents as another factor that must be considered when determining inhibitor potencies against both Cox isoforms. 690657-94-4, Biaryl A ΙT

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Cox inhibitor; detergent effects on inhibitor potencies against

RN 690657-94-4 HCAPLUS

cyclooxygenase isoforms)

CN Benzeneacetic acid, 4-[6-[5-(4-fluorophenyl)-4-[4-(methylsulfonyl)phenyl]-2-thienyl]hexyl]- (9CI) (CA INDEX NAME)

THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 48 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2007 ACS on STN L13 ANSWER 20 OF 32 ACCESSION NUMBER: 2003:855915 HCAPLUS Full-text

DOCUMENT NUMBER:

139:350727

TITLE:

Preparation of indaneacetic acid derivatives for treating diabetes or diabetes-related disorders Wickens, Philip; Cantin, Louis-David; Kumarasinghe,

Ellalahewage; Chuang, Chih-Yuan; Liang, Sidney X. Bayer Pharmaceuticals Corporation, USA

PATENT ASSIGNEE(S):

INVENTOR(S):

PCT Int. Appl., 119 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	PATENT NO.							DATE			APPL	ICAT	ION I	. Õ		D	ATE	
								2003	1030	1	WO 2	003-	US11	725		2	0030	416
M	D 2							2005										
		W:										BG,						
												EE,						
												KG,						
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,
			TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
												GW,						
C	N 1	854	118			Α						2006-						
C	A 2	2482	714			A1		2003	1030		CA 2	2003-	2482	714		2	0030	416
A	U 2	20032	22190	60		A1		2003	1103		AU 2	2003-	2219	60		2	0030	416
												2003-						
												IT,						
												TR,						
U	S 2	2005				A·1						2003-						416
J	P 2	2005	5268	34		\mathbf{T}		2005	0908		JP 2	2003-	5861	39		2	0030	416
U	S 2	20050	0753	38		A1						2004-					0040	
U	US 2005075338 US 7112597							2006										
Ü	US 2006205723							2006	0914		US 2	2006-	4291	36	. '	2	0060	505
PRIORI											US 2	2002-	3730	48P		P 2	0020	416
												2001-					0010	
												2002-					0020	725
												2002-						

OTHER SOURCE(S):

MARPAT 139:350727

GI

$$R^3$$
 R^2
 R^3
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 R^3
 R^4

The title compds. [I; R, R1 = H, alkyl; R2 = H, alkyl, (un)substituted Ph; R3 = H, halo, NO2, etc.; R4 = cycloalkyl, alkenyl, NO2, etc.; X = O, S], useful in the treatment of diseases such as diabetes, obesity, hyperlipidemia, and atherosclerotic diseases, were prepared and formulated. E.g., a multi-step synthesis of (1S)-II, was given.

Ι

II

IT 619300-35-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indaneacetic acid derivs. for treating diabetes or diabetes-related disorders)

RN 619300-35-5 HCAPLUS

CN 1H-Indene-1-acetic acid, 5-[2-[2-[3-(5-acetyl-2-thienyl)phenyl]-5-methyl-4-oxazolyl]ethoxy]-2,3-dihydro-, (1S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:610457 HCAPLUS Full-text

DOCUMENT NUMBER:

139:164808

TITLE:

Preparation of thienopyrimidines as gonadotropic

hormone-releasing hormone antagonists

INVENTOR(S):

Furuya, Shuichi; Imada, Takashi; Hitaka, Takenori;

Miwa, Kazuhiro; Kusaka, Masami; Suzuki, Nobuhiro

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 232 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.	•		KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE	
WC	2003	0644	- -		A1	_	2003	0807		WO 2	003-	JP82	8 8		2	0030	 129
	W:						AU,										
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			-		-	-	IN,										
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,
		PT,	RO,	RU,	sc,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW							
	RW:						MZ,				TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
*		KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
•		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
JE	2003	2924°	92 ·	•	Α	·	2003	1015		JP 2	003-	2050	6		2	0030	129
	1479						2004										
	R:						ES,					•					
							RO,										
US	2005																
PRIORIT	US 2005222174 RIORITY APPLN. INFO.									JP 2	002-	2203	4		A 2	0020	130
										WO 2							
OTHER S	OURCE	(S):			MAR	PAT	139:	1648									

GI

The title compds. I [R1 is C1-4 alkyl; R2 is (1) Ph which may have a AΒ substituent such as amino, mono-C1-4 alkylamino, or di-C1-4alkyl- amino, (2) a heterocyclic group which may have a substituent such as amino, mono-C1-4 alkylamino, or di-C1-4 alkylamino, or the like; R3 is hydrogen or C1-4 alkyl; and R4 is C1-4 alkyl which may have a substituent such as C1-4 alkoxycarbonyl, carboxyl, mono-C1-4 alkylamino, or N-C1-4alkyl-N-C7-10 aralkylamino, or the like] are prepared The bioactivity of two compds. of this invention was demonstrated. Formulations are given.

IT577781-05-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of thienopyrimidines as gonadotropic hormone-releasing hormone antagonists)

RN 577781-05-6 HCAPLUS

Carbamic acid, [3-[[[4-(aminocarbonyl)phenyl]amino]carbonyl]-5-[4[[(ethylamino)carbonyl]amino]phenyl]-4-[[(2-methoxyethyl)methylamino]methy
l]-2-thienyl][(2,6-difluorophenyl)methyl]-, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:117811 HCAPLUS Full-text

DOCUMENT NUMBER:

138:153524

TITLE:

Preparation of indaneacetic acid derivatives for

treating diabetes, obesity, hyperlipidemia, and

atherosclerotic diseases

INVENTOR(S):

Lowe, Derek B.; Wickens, Philip L.; Ma, Xin; Zhang, Mingbao; Bullock, William H.; Coish, Philip D. G.; Mugge, Ingo A.; Stolle, Andreas; Wang, Ming; Wang, Yamin; Zhang, Chengzhi; Zhang, Hai-Jun; Zhu, Lei;

Tsutsumi, Manami; Livingston, James N.

PATENT ASSIGNEE(S):

SOURCE:

Bayer Corporation, USA PCT Int. Appl., 189 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.						KIND DATE				APPLICATION NO.							DATE		
WO 2003011842					A1 20030213			WO 2002-US23614						20020725					
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
								IN,											
								MD,											
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW								
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	BG,	
								EE,											

	P	T, SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI	, CM,	GA,	GN,	GQ,	GW	, ML,	MR,		
	N	E, SN,	TD,	TG														
CA	245562	0		A1		2003	0213			2002-					20020	725		
US	200321	6391		A1 20031120					US 2002-205839					20020725				
US	682833	5																
EP	141480	9		A1						EP 2002-750297								
	R: A	T, BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT,	LI,	LU,	NL,	SE	, MC,	PT,		
	I	E, SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	ΑI	, TR,	BG,	CZ,	EE,	SK				
CN	155890	5		Α		2004	1229			2002-					20020	725		
	200550	T		2005	0331		JP 2003-517034											
BR	200201	1502	Α	A 20050920					2002-	1150								
NZ	531351	Α	A 20060929					2002-	5313									
CN	185411	8		Α		2006	1101		CN	2006-	1000	4609			20020			
NO	200400	0356	•	Α		2004	0319			2004-					20040			
IN	2004DN	00258		Α		2005	0401			2004-					20040			
ZA	200400	1517		Α		2005				2004-					20040			
US	200507	5338		A1		2005	0407		US	2004-	9491	19			20040	922		
US	711259	7 .		B2		2006	0926											
US	200620	5723		A1		2006	0914		-	2006-					20060			
PRIORITY							2001-					20010						
										2002-					20020			
										2002-					20020			
										2002-					20020			
						•				2002-					20020			
				•					US	2004-	9491	19		A3	20040	922		
OMITED CO	MADD	ላጥ	130.	1525	21		•											

OTHER SOURCE(S): MARPAT 138:153524

$$R^3$$
 R^2
 R^3
 R^2
 R^3
 R^3
 R^2
 R^3
 R^3

$$\begin{array}{c} \text{Et} \\ \text{CO}_2\text{H} \\ \\ \text{Ph} \\ \\ \\ \text{O} \end{array}$$

The title compds. I [R = H, alkyl; R1 = H, CO2R, cycloalkyl, etc.; R2 = H, halo, alkyl, etc.; R3 = H, alkyl, (un)substituted Ph; X = O, S; R4 = alkyl, cycloalkyl, Ph, etc.; R5 = H, halo, alkyl optionally substituted with oxo], useful in the treatment of diseases such as diabetes, obesity, hyperlipidemia, and atherosclerotic diseases, were prepared and formulated. Thus, reacting 2-(4-methyl-2-phenyl-1,3-oxazol-5-yl)ethanol with Me 5-hydroxy-2,3-dihydroinden-1-yl-2-butanoate (prepns. given) in the presence of DEAD and PPh3 in THF followed by hydrolysis of the ester afforded the acid II.

IT 496062-92-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

PT 1349843	T	20050930	PT	2001-994514		20011219
ES 2240558	Т3	20051016	ES	2001-1994514		20011219
US 2004072838	A1	20040415	US	2003-451295		20031031
PRIORITY APPLN. INFO.:			GB	2000-31103	Α	20001220
			WO	2001-US51056	W	20011219

OTHER SOURCE(S):

MARPAT 137:140514

GI

IT 444612-13-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiazole and oxazole derivs. as activators of human peroxisome proliferator activated receptors)

RN 444612-13-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[4-[[4-(3-thienyl)phenyl]methyl]-2-[4-(trifluoromethyl)phenyl]-5-thiazolyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:157746 HCAPLUS Full-text

DOCUMENT NUMBER:

136:200176

TITLE:

Preparation of 3-[(oxazolylalkoxy)phenyl]-2-

phenoxypropionic acid derivatives as PPAR agonists for treatment of diabetes mellitus and related conditions

INVENTOR(S):

Ardecky, Robert J.; Brooks, Dawn Alisa; Godfrey, Alexander Glenn; Jones, Sarah Beth; Mantlo, Nathan Bryan; McCarthy, James Ray; Michellys, Pierre-Yves; Rito, Christopher John; Tyhonas, John S.; Winneroski,

Leonard Larry; Xu, Yanping

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA; Ligand Pharmaceuticals

SOURCE: PCT Int. Appl., 217 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.)	DATE		i	APPL	ICAT:	ION I	NO.		Dž	ATE	
WO	2002	0163	32		A1	-	2002	0228	1	 WO 2	001-	US22	- - 617		2	0010	823
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CŃ,
											EE,						
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
											MW,						
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VN,	YU,	ZA,	ZW										
	R₩:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZW,	AT,	ΒE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
· CA	2418	134			A1		2002	0228	1	CA 2	001-	2418	134		2	0010	823
	2001																
EP	1313	717			A1		2003	0528		EP 2	001-	9637	34		2	0010	823
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
							RO,										
JP	2004	5067	22		T		2004	0304		JP 2	002-	5214	33		2	0010	823
US	2004	1382	77		A1		2004	0715		US 2	003-	3431	87		2	0030	729
US	7176	224			B2		2007	0213									
PRIORIT	Y APP	LN.	INFO	.:						US 2	000-	2274	56P		P 2	0000	823
										WO 2	001-	US22	617	1	W 2	0010	823
OTHER C	OHDOR.	101 .			MAD	ידי עם	136.	2001	76								

OTHER SOURCE(S): MARPAT 136:200176

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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Title compds. I [wherein n = 2-4; R1 = H, (halo)alkyl, or Ph; R2 and R3 =
AB
     independently H, alkyl, cycloalkyl(alkyl), alkoxy, or aryl(alkyl); or R2 forms
     (tetrahydro)naphthyl together with the Ph to which they are bound; R4 = alkyl;
     R5 = independently H or (un)substituted (hetero)aryl, with provisos; R6 = H or
     (amino)alkyl; R7 and R8 = independently H, (cyclo)alkyl, (halo)alkoxy, or
     halo(alkyl); or R8 form benzodioxolyl together with the Ph to which they are
     bound; and pharmaceutically acceptable salts, solvates, and hydrates thereof]
     were prepared as agonists of peroxisome proliferator activated receptors
     (PPARs). For example, 2-[2-(3-bromophenyl)-5-methyloxazol-4-yl]ethanol was
     coupled with p-fluorophenyl boronic acid in the presence of PPh3, Pd(OAc)2,
     and Na2CO3 to give the biphenyl derivative (36%). Esterification with tosyl
     anhydride in the presence of pyridine and DMAP, followed by reaction with 3-
     (4-hydroxyphenyl)-2-methyl-2-phenoxypropionic acid Et ester in the presence of
     polystyrene bound 1,5,7-triazabicyclo[4.4.0]dec-5-ene and hydrolysis with
     NaOH, afforded II (24%). The latter bound to PPAR\alpha and PPAR\gamma with IC50 values
     of 147 nM and 41 nM, resp., and activated the nuclear transcription factors
     huPPAR\alpha and huPPAR\gamma with cotransfection efficacies of 38% and 93%, resp.
     addition, HDLc serum levels increased by 40.4% in male transgenic mice dosed
     with 30 mg/kg of II, and glucose levels were normalized to 91% in male
     diabetic (db/db) mice dosed with 30 mg/kg of II. Thus, I are useful in the
     treatment and prevention of diabetes mellitus and related conditions.
     401468-55-1P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
IT
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-phenoxypropionic acid
     401468-60-8P, 2-Methyl-3-[4-[2-[5-methyl-2-(3-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-phenoxypropionic acid
     401468-64-2P, 2-Methyl-3-[4-[2-[5-methyl-2-(3-thiophen-3-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-phenoxypropionic acid
     401468-75-5P, 3-[3-Methoxy-4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-methyl-2-phenoxypropionic acid
     401468-81-3P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]-3-propylphenyl]-2-phenoxypropionic acid
     401468-88-0P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]naphthalen-1-yl]-2-phenoxypropionic acid
     401468-94-8P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-tert-butylphenoxy)propionic acid
     401468-95-9P, 2-Methyl-3-[4-[2-[5-methyl-2-(3-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-tert-butylphenoxy)propionic acid
     401468-96-0P, 2-Methyl-3-[4-[2-[5-methyl-2-(3-thiophen-3-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-tert-butylphenoxy)propionic acid
     401469-00-9P, 2-(3-Fluorophenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(4-
     thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-02-1P, 2-(3-tert-Butylphenoxy)-2-methyl-3-[4-[2-[5-methyl-2-
     (4-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-04-3P, 2-(2-Fluorophenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(4-
     thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-06-5P, 2-(4-Chlorophenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(3-
     thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-10-1P, 2-(4-Cyclohexylphenoxy)-2-methyl-3-[4-[2-[5-methyl-2-
     (3-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-14-5P, 2-(3,4-Dimethylphenoxy)-2-methyl-3-[4-[2-[5-methyl-2-
     (4-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-17-8P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-p-tolyloxypropionic acid
```

401469-23-6P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-trifluoromethoxyphenoxy)propionic acid 401469-28-1P, 2-[4-[2-[5-Methyl-2-(3-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]benzyl]-2-phenoxybutyric acid 401469-30-5P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-trifluoromethylphenoxy)propionic acid 401469-35-0P, 2-(3,4-Difluorophenoxy)-2-methyl-3-[4-[2-[5methyl-2-(4-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-39-4P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-m-tolyloxypropionic acid .401469-43-0P, 2-(4-Fluorophenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(4thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-44-1P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(3-trifluoromethylphenoxy)propionic acid 401469-49-6P, 2-(3-Methoxyphenoxy)-2-methyl-3-[4-[2-[5methyl-2-(4-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-53-2P, 2-(Benzo[1,3]dioxol-5-yloxy)-2-methyl-3-[4-[2-[5methyl-2-(3-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-57-6P, 2-[4-[2-[5-Methyl-2-(3-thiophen-2-ylphenyl)]] oxazol-4yl]ethoxy]benzyl]-2-phenoxyhexanoic acid 401469-62-3P, 2-(2-Methoxyphenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(3-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-65-6P, (R) - 2 - Methyl - 3 - [4 - [2 - [5 - methyl - 2 - (4 - thiophen - 2 - ylphenyl)] oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiyl]ethoxy]phenyl]-2-p-tolyloxypropionic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(PPAR agonist; preparation of oxazolylalkoxyphenylpropionic acid PPAR agonists by reacting toluenesulfonic acid oxazolylalkyl esters with hydroxyphenylpropanoates for treatment of diabetes mellitus and related conditions)

RN 401468-55-1 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxyl- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401468-60-8 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxyl- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401468-64-2 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[3-(3-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401468-75-5 HCAPLUS

CN Benzenepropanoic acid, 3-methoxy- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401468-81-3 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy-3-propyl- (9CI) (CA INDEX NAME)

RN 401468-88-0 HCAPLUS

CN 1-Naphthalenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 401468-94-8 HCAPLUS

CN Benzenepropanoic acid, $\alpha-[4-(1,1-\text{dimethylethyl})\text{phenoxy}]-\alpha-$ methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401468-95-9 HCAPLUS

CN Benzenepropanoic acid, $\alpha-[4-(1,1-\text{dimethylethyl})\text{phenoxy}]-\alpha-$ methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401468-96-0 HCAPLUS

CN Benzenepropanoic acid, $\alpha-[4-(1,1-\text{dimethylethyl})\text{phenoxy}]-\alpha-$ methyl-4-[2-[5-methyl-2-[3-(3-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

$$t-Bu$$
 $O-CH_2-CH_2$
 Me
 $O-CH_2-CH_2$
 Me

RN 401469-00-9 HCAPLUS

CN Benzenepropanoic acid, α -(3-fluorophenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-02-1 HCAPLUS

CN Benzenepropanoic acid, α -[3-(1,1-dimethylethyl)phenoxy]- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-04-3 HCAPLUS.

CN Benzenepropanoic acid, α -(2-fluorophenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-06-5 HCAPLUS

CN Benzenepropanoic acid, α -(4-chlorophenoxy)- α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

$$C1$$
 $O-CO_2H$
 $O-CH_2-CH_2$
 Me
 $O-CH_2-CH_2$
 Me

RN 401469-10-1 HCAPLUS

CN Benzenepropanoic acid, α -(4-cyclohexylphenoxy)- α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-14-5 HCAPLUS

CN Benzenepropanoic acid, α -(3,4-dimethylphenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

Me
$$O-CH_2-CH_2$$
 $O-CH_2-CH_2$ Me Me

RN 401469-17-8 HCAPLUS

CN Benzenepropanoic acid, α -methyl- α -(4-methylphenoxy)-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-23-6 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -[4-(trifluoromethoxy)phenoxy]-(9CI) (CA INDEX NAME)

RN 401469-28-1 HCAPLUS

CN Benzenepropanoic acid, α -ethyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401469-30-5 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -[4-(trifluoromethyl)phenoxy]-(9CI) (CA INDEX NAME)

RN 401469-35-0 HCAPLUS

CN Benzenepropanoic acid, α -(3,4-difluorophenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX

RN 401469-39-4 HCAPLUS

CN Benzenepropanoic acid, α -methyl- α -(3-methylphenoxy)-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-43-0 HCAPLUS

CN Benzenepropanoic acid, α -(4-fluorophenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-44-1 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -[3-(trifluoromethyl)phenoxy]-(9CI) (CA INDEX NAME)

RN 401469-49-6 HCAPLUS

CN Benzenepropanoic acid, α -(3-methoxyphenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-53-2 HCAPLUS

CN Benzenepropanoic acid, α -(1,3-benzodioxol-5-yloxy)- α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{S} \\ \text{Me} \end{array}$$

RN 401469-57-6 HCAPLUS

CN Benzenepropanoic acid, α -butyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401469-62-3 HCAPLUS

CN Benzenepropanoic acid, α -(2-methoxyphenoxy)- α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-65-6 HCAPLUS

CN Benzenepropanoic acid, α -methyl- α -(4-methylphenoxy)-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]-, (α R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:157745 HCAPLUS Full-text

DOCUMENT NUMBER: 136:216740

TITLE: Preparation of oxazolyl-arylpropionic acid derivatives

and their use as PPAR agonists

INVENTOR(S): Brooks, Dawn Alisa; Godfrey, Alexander Glenn; Jones,

Sarah Beth; McCarthy, James Ray; Rito, Christopher John; Winneroski, Leonard Larry, Jr.; Xu, Yanping

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 249 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT									APPLICATION NO.						DATE		
WO.	2002	0163	31		A1	-	2002	0228			2001-				2	0010	823
	W:										BG,						
											EE,						
											KG,						
											MW,						
											ТJ,						
					YU,												
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	ΒĒ,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG	
CA	2418	104			A1		2002	0228		CA 2	2001-	2418	104		2	0010	823
AU	2001	8465	9		Α		2002	0304		AU 2	2001-	8465	9		2	0010	823
EP											2001-						
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
BR	2001	0134	09		Α		2003	0701		BR 2	2001-	1340	9		2	0010	823
HU	2003	0085	7		A2		2003	1028		HU 2	2003-	857			2	0010	823
JP	2004	5067	21		T		2004	0304		JP 2	2002-	5214	32		2	0010	823
	5238				Α		2004	0924		NZ 2	2001-	5238	04		2	0010	823
										ZA 2	2003-	570			2	0030	121
	2004						2004			US 2	2003-	3434	76		2	0030	129
	6930				В2		2005						_		_		100
	2003										2003-						
	2003										2003-				_	0030	
	2005				A1		2005				2005-				_	0050	
CIORIT	Y APP	LN.	INFO	.:			•			US 2	2000-	2272	34P		P 2	0000	823

US 2003-343476 CASREACT 136:216740; MARPAT 136:216740

OTHER SOURCE(S):

$$R2$$
(CH2) nWY
 $R3$
 $COOR5$
 $R4$
 I

Title compds. [I; n = 2, 3, 4; W = CH2, CH(OH), CO, O; R1 = aryl, heteroaryl, cycloalkyl, heterocycloalkyl, arylalkyl, heteroarylalkyl, cycloalkylalkyl, (CH3)3C; R2 = H, alkyl haloalkyl, C6H5; Y = thiophen-2,5-diyl, phenylene; R3 = alkyl, haloalkyl; R4 = C6H5, naphthyl, 1,2,3,4-tetrahydronaphthyl, quinolyl, pyridyl, benzo[1,3]dioxol-5-yl; R5 = H, alkyl, aminoalkyl], stereoisomers, pharmaceutically acceptable salts, solvates and hydrates thereof are prepared for modulating a peroxisome proliferator-activated receptor (PPAR), particularly in the treatment of diabetes mellitus, cardiovascular disease, and animal syndrome X disease. Thus, the title compound II was prepared and tested for activity of lowering triglyceride serum level in mice, at 41.3%.

401790-85-0P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxazolyl-arylpropionic acid derivs. and their use as PPAR agonists)

RN 401790-85-0 HCAPLUS

CN Benzenepropanoic acid, $4-[2-(2-\text{cyclohexyl-}5-\text{methyl-}4-\text{oxazolyl})\text{ ethoxy}]-\alpha-\text{methyl-}\alpha-[3-(3-\text{thienyl})\text{ phenoxy}]-(9CI)$ (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:822158 HCAPLUS Full-text

DOCUMENT NUMBER:

136:263035

TITLE:

Reactions of thiobenzoylketene S, N-acetals with silyl enol ethers of cyclic ketones in the presence of desilylating reagents: formation and desulfurization

of thienolactams

AUTHOR (S):

Lee, Jong Seok; Lee, Dong Joon; Kim, Bo Sung; Kim,

Kyongtae

CORPORATE SOURCE:

School of Chemistry and Molecular Engineering, Seoul

National University, 151-742, S. Korea

SOURCE:

Journal of the Chemical Society, Perkin Transactions 1

(2001), (21), 2774-2780

CODEN: JCSPCE; ISSN: 1472-7781

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 136:263035

Medium-sized thienolactams can be directly prepared from thiobenzoylketene S,N-acetals, Hg(OAc)2, and silyl enol ethers of cyclic ketones, and either TBAF or TASF. However, by adding either water or alc. to the foregoing mixture, 3-methylamino-5-phenylthiophenes, in which the ω-position of longchain alkanoic acids and alkanoic esters are bonded to C-2 of the thiophene ring, can be obtained albeit in low yields. Sequential treatment of the thienolactams with Raney nickel and Adam's catalyst results in completely reductive desulfurization of thienolactam mols.

404887-70-3P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation)

(reactions of thiobenzoylketene S, N-acetals with silyl enol ethers of cyclic ketones in the presence of desilylating reagents)

404887-70-3 HCAPLUS RN

Benzoic acid, 2-[2-[3-(methylamino)-5-phenyl-2-thienyl]ethyl]- (9CI) (CA CN INDEX NAME)

REFERENCE COUNT:

THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS 35 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER:

L13 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2001:167982 HCAPLUS Full-text

DOCUMENT NUMBER:

134:207811

TITLE:

Preparation of biaryloxa(thia)zole derivatives as PPAR

modulators

INVENTOR(S):

Brooks, Dawn A.; Rito, Christopher J.; Shuker, Anthony

J.; Dominianni, Samuel J.; Warshawsky, Alan M.;

Gossett, Lynn S.; Matthews, Donald P.; Hay, David A.; Ardecky, Robert J.; Michellys, Pierre-Yves; Tyhonas,

John S.

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA; Ligand Pharmaceuticals

Incorporated

SOURCE:

PCT Int. Appl., 232 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE		APPLICATION NO.						DATE			
	2001	0161	20		A1					WO	2000	-US23	358			20000	823
WO	2001								D.	-		22	DV	D. 6	~ n	CII	an.
	W:															, CH,	
																, GM,	
																, LS,	
																, RO,	
														UG,	US	, UZ,	VN,
							BY,										
	RW:															, СН,	
		-		-											SE	, BF,	ВJ,
							GN,										
CA	2382	966			A1		2001	0308		CA	2000	-2382	966			20000	823
	1206									ΕP	2000	-9594	01			20000	823
EP					B1 20031015 H, DE, DK, ES, FR,						•		•				
	R:											, LI,	LU,	NL,	SE	, MC,	PT,
							RO,	MK,	CY,	ΑI	;						
US	6417	212			В1		2002	0709		US	2000	-6444	57			20000	823
JP	2003 2520 1206 2204	5083	89		T		2003	0304		JΡ	2001	-5196	87			20000	823
AT	2520	91	٠		T		2003	1115		ΑT	2000	-9594	01			20000	823
PT	1206	457			T		2004	0331		PT	2000	-9594	01			20000	823
ES	2204	684			Т3		2004	0501		ES	2000	-9594	01			20000	823
US	2003	0455	58		A1		2003	0306		US	2002	-1213	73			20020	411
	6610				В2		2003	0826									
US	2004	0190	90		A1			0129		US	2003	-4344	25			20030	507
US	6825	222			В2		2004	1130									
PRIORIT	Y APP	LN.								US	1999	-1511	62P		P	19990	827
										US	2000	-6444	57		A3	20000	823
										WO	2000	-US23	358		W	20000	823
																20020	
OMILED C	OUD CE	101.			MAD	יתעם	121.	2070	1 1								

OTHER SOURCE(S):

MARPAT 134:207811

GI

Title compds. (I) [wherein n=2-4; V=0 or S; W=0, S, or SO2; R1=H, AΒ alkyl, Ph, or CF3; R2 = independently H, (cyclo)alkyl, cycloalkylalkyl,

aryl(alkyl), or together with the Ph to which they are bound form naphthyl or 1,2,3,4-tetrahydronaphthyl; R3 = independently H, (cyclo)alkyl, cycloalkylalkyl, or aryl(alkyl); R4 = independently H, alkyl, aryl, or benzyl; R5 = independently H or (un)substituted (hetero)aryl, provided that at least one R5 = (un)substituted (hetero)aryl; and R6 = H or (amino)alkyl] were prepared as are modulators of peroxisome proliferator activated receptors (PPARs) and are useful in the treatment of type II diabetes and cardiovascular diseases. For example, a mixture of the toluene-4-sulfonic acid 2-(2-(biphenyl-4-yl)-5-methyloxazol-4-yl)ethyl ester and 2-(3-hydroxyphenoxy)-2methylpropanoic acid Et ester was heated at 55°C in DMF for 18 h and the intermediate deesterified using NaOH in EtOH and THF to afford the title compound II. II bound to human PPARa and PPARy with IC50 values of 97 nM and 532 nM, resp., and activated human PPARα and PPARγ with efficacies of 97% and 70%, resp. In assays evaluating triglyceride and cholesterol levels in mice transgenic for human apoAI, administration of II reduced triglyceride serum levels by 60.5% and increased HDLc serum levels by 204%. Glucose normalization of 95% was attained in male diabetic (db/db) mice dosed with II. 328918-32-7P 328918-74-7P 328920-12-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biaryl oxa(thia)zole PPAR modulators by coupling biaryloxazolylalkyl tosylates with alcs. or thiols)

RN 328918-32-7 HCAPLUS

IT

CN

Propanoic acid, 2-methyl-2-[4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME).

RN 328918-74-7 HCAPLUS

CN Propanoic acid, 2-methyl-2-[4-[2-[5-methyl-2-[4-(5-methyl-2-thienyl)phenyl]-4-oxazolyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 328920-12-3 HCAPLUS

CN Benzenepropanoic acid, α -methyl- α -[4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1996:134085 HCAPLUS Full-text

DOCUMENT NUMBER:

124:178874

TITLE:

Methine and azomethine dyes based on naphthoquinones

and their application to nonlinear optics

INVENTOR(S):

Beckmann, Stefan; Etzbach, Karl-Heinz; Sens, Ruediger

PATENT ASSIGNEE(S):

BASF A.-G., Germany Ger. Offen., 12 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4422333	A1	19960104	DE 1994-4422333	19940627
WO 9600409	A1	19960104	WO 1995-EP2328	19950616
W: JP, KR, US				
RW: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LU, I	MC, NL, PT, SE
EP 767927	A1	19970416	EP 1995-924250	19950616
EP 767927	B1	19980902	•	
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI,	NL, PT, SE
JP 10502184	T	19980224	JP 1995-502758	19950616
AT 170638	T	19980915	AT 1995-924250	19950616
US 5756753	Α	19980526	US 1996-750846	19961224
PRIORITY APPLN. INFO.:			DE 1994-4422333	A 19940627
			WO 1995-EP2328	W 19950616

OTHER SOURCE(S):

MARPAT 124:178874

GΙ

$$XZ$$
 A
 $C(CN)_2$
 R^2
 R^3
 I

The dyes (I; R1, R2, R3 = H, C1-4-alkyl, C5-7-cycloalkyl; X = 5- or 6-membered carbo- or heterocyclic ring; Z = N, CH, CH:CHCH; rings A and B may be benzoannellated) may be incorporated into optical nonlinear materials. I have good hyperpolarizability, thermal stability, and processability. Thus, 4- (dimethylamino)cinnamaldehyde was condensed with 1-(dicyanomethyl)naphthalene

to give a trimethine dye with second-order susceptibility >50 times that of p-nitroaniline.

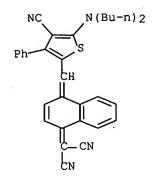
IT 173982-32-6P

RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)

(preparation of methine and azomethine dyes based on naphthoquinones for nonlinear optics)

RN 173982-32-6 HCAPLUS

CN Propanedinitrile, [4-[[4-cyano-5-(dibutylamino)-3-phenyl-2-thienyl]methylene]-1(4H)-naphthalenylidene]- (9CI) (CA INDEX NAME)



L13 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1992:194074 HCAPLUS Full-text

DOCUMENT NUMBER:

116:194074

TITLE:

Furans and thiophenes from etacrynic acid

AUTHOR(S):

Goerlitzer, Klaus; Boemeke, Michael

CORPORATE SOURCE:

Inst. Pharm. Chem., Tech. Univ. Braunschweig,

Braunschweig, 3300, Germany

SOURCE:

Archiv der Pharmazie (Weinheim, Germany) (1992),

325(1), 9-12

CODEN: ARPMAS; ISSN: 0365-6233

DOCUMENT TYPE:

Journal German

LANGUAGE:
OTHER SOURCE(S):

CASREACT 116:194074

GI For diagram(s), see printed CA Issue.

R1COCH2CHEtCOR [I, R = C6H2(OCH2CO2H)Cl2-4,2,3, R1 = H, Me, RCOCHEtCH2] react with polyphosphoric acid (PPA) to yield the furans II (X = O) and with P2S5 to the thiophenes II (X = S). I (R1 = OH) cyclizes with PPA to form the α,β -unsatd. butyrolactone. I (R1 = OH) is reduced by NaBH4 chemo- and diastereoselectively to give the γ -hydroxy carboxylic acid (3RS, 4RS)-HOCHRCHEtCH2CO2H which is cyclized to III by dehydration with PPA. II (X = SO2) are obtained from II (X = S) by oxidation with magnesium monoperoxyphthalate. Under the same conditions II (X = O, R1 = Me) is cleaved to yield (Z)-MeCOCH:CEtCOR, which tautomerizes slowly forming (E)-MeCOCH2C(COR):CHMe.

IT 139519-99-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 139519-99-6 HCAPLUS

CN Acetic acid, [4-[5-[2-[4-(carboxymethoxy)-2,3-dichlorobenzoyl]butyl]-3-ethyl-2-thienyl]-2,3-dichlorophenoxy]- (9CI) (CA INDEX NAME)

L13 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1987:571992 HCAPLUS Full-text

DOCUMENT NUMBER:

107:171992

TITLE:

Use of thiophenes as pH indicators, especially in a

nonenzymic glucose test

INVENTOR(S):

Heidenreich, Holger; Wolfrum, Gerhard; Wehling, Klaus;

Hugl, Herbert

PATENT ASSIGNEE(S):

Miles Laboratories, Inc., USA

SOURCE:

Ger. Offen., 9 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3541097	A1	19870527	DE 1985-3541097	19851121
EP 248112	A2	19871209	EP 1986-115597	19861111
EP 248112	A3	19890322		
R: DE, FR, GB,	IT			
AU 8665185 .	Α	19870528	AU 1986-65185	19861114
AU 595257	B2	19900329		
JP 62121362	Α	19870602	JP 198 <u>6</u> -273077	19861118
PRIORITY APPLN. INFO .:		•	DE 1985-3541097 A	19851121
GI				

$$R^{7}$$
 R^{6}
 R^{5}
 R^{6}
 R^{7}
 R^{6}
 R^{7}
 R^{6}
 R^{7}
 R^{6}
 R^{7}
 R^{7

Thiophene derivs. I [R1, R2 = H, (substituted) alkyl, cycloalkyl, aralkyl, or AΒ R1NR2 = ring; R3 = leaving group; R4-R9 = chromogenic groups; n = 0, 1] are pH indicators which are colorless in alkaline and colored in acid solution, with a transition point near neutrality. They can be used for determination of sugars, which form complexes with borate or alkaline earth hydroxides with release of H+. I [R1R2 = (CH2CH2)2O; R3 = morpholino; R4-R8 = H; R9 = 4-MeO](II) was prepared by reaction of 2-morpholino-3,4-diphenylthiophene (prepared by reaction of phenylacetic acid thiomorpholide with phenacyl bromide and cyclization) with 4-dimethylaminobenzaldehyde, refluxing in 70% HClO4, and refluxing the product in EtOH-morpholine (1:1). II changed from colorless to

dark blue over the pH range 9.8-7.3. II was dissolved in N-methylpyrrolidone, mixed 1:1 with pH borate buffer (pH 9), and the pH was adjusted to 9.0 with 1NHCl; the final II concentration was 1.25 mM. This reagent was used to determine glucose concentration over the range 0.5-5.0 g/100 mL from the absorbents at 600 nm.

110711-81-4P IT

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as pH indicator for nonenzymic glucose determination)

110711-81-4 HCAPLUS RN

Propanenitrile, 3-[4-[3,4-bis(2-chloro-4-methylphenyl)-5-(4-methyl-1-methCN piperazinyl)-2-thienyl]phenoxymethyl]-3-chlorophenyl]ethylamino]- (9CI) (CA INDEX NAME)

Me
$$\stackrel{\text{Et}}{\underset{\text{N-CH}_2-\text{CH}_2-\text{CN}}{\text{C1}}}$$

L13 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 1973:85953 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

78:85953

TITLE:

SOURCE:

Electrophotographic spectral sensitizers Depoorter, Henri; Moelants, Felix Jan

INVENTOR(S): PATENT ASSIGNEE(S):

Agfa-Gevaert A.-G. Ger. Offen., 43 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
DE 2215829	Α	19721019	DE 1972-2215829		19720330
US 3764317	Α	19731009	US 1972-236967		19720322
· GB 1379755	Α	19750108	GB 1971-9094		19720323
BE 781664	A2	19721005	BE 1972-3916		19720405
PRIORITY APPLN. INFO.:			GB 1971-9094	Α	19710408

Sensitizers (I) for organic and inorg. photoconductors were prepared, where AB R2N = Et2N, morpholino, or piperidino and Y = (CH:CH)nCH+Ar, CH:Q, or (CH:CH)mQ1 (Q = N-containing heterocycle or its quaternary salt; Q1 = quaternary heterocycle; n = 0,1,2; m = 1,2; Ar = substituted Ph or thienyl).Thus, a mixture of 2-morpholino-3,4-diphenyl-5-formylthiophene and 1-phenyl-3carboxy-5-pyrazolone was refluxed in MeOCH2CH2OH to give pyrazolone sensitizer II [38215-21-3], λ maximum 536 nm (MeOH). In another example, a mixture of 2-morpholino-3,4-diphenylthiophene, 4-HCOC6H4N(CH2CO2H)2, and HClO4 was refluxed in MeOH to give carbonium sensitizer III [38215-22-4], λ maximum 573 nm(CH2Cl2). Electrophotog. compns. containing I are also described. 38215-22-4

RL: USES (Uses)

(photog. sensitization maximum of)

RN 38215-22-4 HCAPLUS

CN Methanaminium, 1-carboxy-N-(carboxymethyl)-N-[4-[[5-(4-morpholinyl)-3,4-diphenyl-2-thienyl]methylene]-2,5-cyclohexadien-1-ylidene]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

IT

CRN 47810-22-0 CMF C31 H29 N2 O5 S

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CM 2

CRN 14797-73-0 CMF Cl O4

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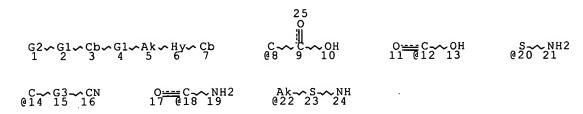
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STEREO ATTRIBUTES: NONE

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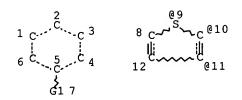
L9 STR ·



REP G1=(0-1) A
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DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE L11 STR



VAR G1=9/10/11 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

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L15	4115	SEA FILE=HCAPLUS ABB=ON PLU=ON ("WANG XIAODONG"/AU OR "WANG
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L16	349	SEA FILE=HCAPLUS ABB=ON PLU=ON ("ZHU GUOXIAN"/AU OR "ZHU
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L17	5	SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND L15 AND L16
L18	21	SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND (L15 OR L16)

L19	188	SEA FILE=HCAPLUS AB	B=ON PLU=ON	L15 AND L16
L20	5	SEA FILE=HCAPLUS ABI	B=ON PLU=ON	L19 AND PPAR
L21	8707	SEA FILE=HCAPLUS AB	B=ON PLU=ON	"PEROXISOME PROLIFERATOR-ACTIV
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L23 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:861877 HCAPLUS Full-text

TITLE: Tetrahydro naphthyridine as inhibitors of cholesteryl

ester transfer protein

AUTHOR(S): Parthasarathy, Saravanan; Fernandez, Maria-Carmen;

Mateo, Ana I.; Escribano, Ana; Martin de la Nava, Eva

M.; Wang, Xiaodong; Cockerham, Sandra L.;

Beyer, Thomas P.; Schmidt, Robert J.; Cao, Guoging;

Stephenson, Gregory; Mantlo, Nathan B.

CORPORATE SOURCE: Discovery Chemistry Research & Technology, Eli Lilly

and Company, Indianapolis, IN, 46285, USA

SOURCE: Abstracts of Papers, 232nd ACS National Meeting, San

Francisco, CA, United States, Sept. 10-14, 2006 (2006), MEDI-423. American Chemical Society: Washington, D.

C.

CODEN: 69IHRD

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

Cholesteryl ester transfer protein (CETP) is a plasma glycoprotein that mediates the transfer of cholesteryl ester from high-d. lipoprotein (HDL) to low-d. lipoprotein (LDL) and very low-d. lipoprotein (VLDL) with a reciprocal exchange of triglyceride. Recently, small-mol. CETP inhibitors have been shown to raise HDL cholesterol and slow the progression of atherosclerosis in animal models and humans. In a continuation of our effort in the atherosclerosis arena, we discovered a series of heteroarom. fused piperidines as CETP inhibitors. Herein we describe our SAR effort for a novel series 1,5-naphthyridines as CETP inhibitors, within this series we examined the structure-activity-relationships depicted in I. This effort lead to the identification of II with in vitro human plasma CETP inhibitory activity (IC50) in the 10-8 M range. The in vitro and in vivo SAR of this series will be described.

L23 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:100336 HCAPLUS Full-text

DOCUMENT NUMBER: 144:170892

TITLE: Preparation of tetrahydroquinoline derivatives as

cholesterol ester-exchanging protein inhibitors for

treating dyslipidemia and atherosclerosis

INVENTOR(S): Escribano, Ana Maria; Fernandez, Maria Carmen;

Mantlo, Nathan Bryan; Mateo-Herranz, Ana Isabel; De La Nava, Eva Maria Martin; Wang,

Xiaodong

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

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WO 2006	012093		A1	_	2006	0202			2005-				2	0050	622
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	CG, CI														
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CA 2570	688		A1		2006	0202		CA 2	2005-	2570	688		2	0050	622
PRIORITY APP	LN. IN	·. o`						US 2	2004-	5827	08P		P 2	0040	624
						US 2	2004-	6272	41P		P 20041112		112		
								2005-					0050	324	
						WO 2	2005-	US21	789		W 2	0050	622		
OTHER SOURCE	OTHER SOURCE(S):					1708	92								

Tetrahydroquinoline derivs. (shown as I; variables defined below; e.g. (2R,4S)-4-[[3,5-bis(trifluoromethyl)benzyl](2-propyl-2H-tetrazol-5- yl)amino]-2-ethyl-6-trifluoromethyl-3,4-dihydro-2H-quinoline-1-carboxylic acid iso-Pr ester (shown as II)) their pharmaceutical compns. and methods of use are disclosed. Although the methods of preparation are not claimed, prepns. and/or characterization data for .apprx.40 examples of I are included. For example, II was prepared in 11 steps involving the following intermediates:

(R)-3-aminopentanenitrile methanesulfonate (94, 77, 82 % for substeps), (3R)-3-[(4-trifluoromethylphenyl)amino]pentanenitrile (98 %), (3R)-3-[(4trifluoromethylphenyl)amino]pentanamide (83 %), [(3R)-3-[(4trifluoromethylphenyl)amino]pentanoyl]carbamic acid benzyl ester (96 %), ((2R,4S)-2-ethyl-6-trifluoromethyl-1,2,3,4- tetrahydroquinolin-4-yl)carbamic acid benzyl ester (98 %), (2R,4S)-4-[(benzyloxycarbonyl)amino]-2-ethyl-6trifluoromethyl-3,4-dihydro-2H-quinoline-1-carboxylic acid iso-Pr ester (100 %), (2R,4S)-4-amino-2- ethyl-6-trifluoromethyl-3,4-dihydro-2H-quinoline-1carboxylic acid iso-Pr ester (100 %), (2R, 4S)-4-[[3,5bis(trifluoromethyl)benzyl]amino]-2-ethyl-6- trifluoromethyl-3,4-dihydro-2Hquinoline-1-carboxylic acid iso-Pr ester (76 %), (2R,4S)-4-[[3,5bis(trifluoromethyl)benzyl](cyano)amino]-2-ethyl-6- trifluoromethyl-3,4dihydro-2H-quinoline-1-carboxylic acid iso-Pr ester (72 %), and (2R,4S)-4-[[3,5-bis(trifluoromethyl)benzyl](1H-tetrazol-5- yl)amino]-2-ethyl-6trifluoromethyl-3,4-dihydro-2H-quinoline-1-carboxylic acid iso-Pr ester (100 %). For I: n = 0-3; q = 0-4; Y is a bond, C:O, or -S(0)t (t = 0-2); R1 = hydroxy, C1-C6 alkyl, aryl, C2-C6 alkenyl, C1-C6 haloalkyl, C1-C6 alkylheterocyclic, C3-C8 cycloalkyl, C1-C6 alkylcycloalkyl, C1-C6 alkylaryl, heterocyclyl, C1-C6 alkyl alc., C1-C6 alkoxy, aryloxy, -OC2-C6 alkenyl, -OC1-C6 haloalkyl, -OC1-C6 alkylheterocyclic, -OC3-C8 cycloalkyl, -OC1-C6 alkylcycloalkyl, -NR7R8 and -OC1-C6 alkylaryl, -O-heterocyclic, -OC1-C6 alkylheterocyclic, C1-C6 alkyl-O-C(O)NR7R8, C1-C6 alkyl-NR7C(O)NR7R8, and C0-C6 alkylCOOR11. R2a and R2b = H, hydroxy, halo, oxo, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C6 alkoxy, C1-6 haloalkyl, CONR11R12, -NR11SO2R12, -NR11COR12, C0-C6 alkylNR11R12, C0-C6 alkylCOR11, C0-C6 alkylCOOR11, cyano, nitro, C0-C6 alkylcycloalkyl, Ph, C0-C6 alkylaryl, heterocyclyl, C3-C8 cycloalkyl, and C1-C6 haloalkyl; R3a and R3b = H, halo, C1-C6 alkyl, C2-C6 alkene, C2-C6 alkynyl, C1-C6 alkoxy, and C1-C6 haloalkyl; R4 = -NR4aR4b; R5 = H, hydroxy, halo, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, et al.; R6 = H, C1-C6 alkyl, C2-C6 alkenyl, hydroxy, COR7, C1-C6 alkoxy, aryloxy, et al.; addnl. details including provisos are given in the claims. 30 Mg/kg doses of 8 examples of I in mice caused 120-226 % increases in HDL-cholesterol.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:11309 HCAPLUS Full-tex

DOCUMENT NUMBER: 144:108328

TITLE: Preparation of benzo[b]azepines and related compounds

as inhibitors of cholesterol ester transfer protein

for treating dyslipidemia

INVENTOR(S): Chen, Xinchao; Cioffi, Christopher Lawrence; Dinn,

Sean Richard; Escribano, Ana Maria; Fernandez, Maria Carmen; Fields, Todd; Herr, Robert Jason; Mantlo,

Nathan Bryan; De la Nava, Eva Maria Martin;

Mateo-Herranz, Ana Isabel; Parthasarathy, Saravanan;

Wang, Xiaodong

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 298 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PAT	ENT	NO.	•		KIN	D	DATE			APPL	ICAT:	ION	NO.		D	ATE	
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WO 2006002342				A1 20060105			WO 2005-US22389						20050623					
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
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OTHER SOURCE(S):

MARPAT 144:108328

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Benzo[b]azepines and related compds. (shown as I; variables defined below; AΒ e.g. [3,5-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8trifluoromethyl-2,3,4,5-tetrahydro-1H-benzo[b]azepin-5-yl](2-methyl-2Htetrazol-5-yl)amine (shown as II)) and their pharmaceutical compns. and methods of use are disclosed. Although the methods of preparation are not claimed, prepns. and/or characterization data for .apprx.200 examples of I are included. For example, II was prepared in 19 steps (>99, 95, 99, 92, >99, 96, 83, 87, 80, 63, 76, 85, >99, 98, >99, 99 and 70% yields, resp.) starting with preparation of Me 2-nitro-4-trifluoromethylbenzoate from the acid. I: n = 0-3; m = 0-3; p is 1 or 2; q is 0-4; Y is a bond, C:0, or S(0)t; wherein t = 0-2; R1 = hydroxy, C1-C6 alkyl, aryl, C2-C6 alkenyl, C1-C6 haloalkyl, et al.; each R2 is bound only to a C atom and is H, hydroxy, halogen, oxo, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, et al.; R3a and R3b = H, halogen, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C6 alkoxy, and C1-C6 haloalkyl; R4 = -NR4aR4b wherein R4a is a heterocyclic, C1-C6 alkylheterocyclic, or C2-C6 alkenylheterocyclic group; and R4b = C1-C6 alkylaryl, C2-C6 alkenylaryl, C2-C6 alkynylaryl, C1-C6 alkylheterocyclic, C2-C6 alkenylheterocyclic, C1-C6 alkylcycloalkyl, et al.; R5 = H, hydroxy, halogen, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C6 alkoxy, aryloxy, et al.; R6 = H, C1-C6 alkyl, C2-C6 alkenyl, hydroxy, COR7, C1-C6 alkoxy, aryloxy,

-OC2-C6 alkenyl, -OC1-C6 haloalkyl, C1-C6 alkylNR7R8, C3-C8 cycloalkyl, heterocyclic, aryl, C1-C6 alkyl-O-C(O)NR7R8, C1-C6 alkyl-NR7C(O)NR7R8 and C1-C6 alkylcycloalkyl; addnl. details including provisos are given in the claims. The ability of 37 examples of I to elevate HDL cholesterol levels was

determined

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:1130646 HCAPLUS Full-text

DOCUMENT NUMBER:

143:405809

TITLE:

Preparation of heterocyclic piperidine derivatives as

inhibitor of cholesterol ester transfer protein

INVENTOR(S):

Bell, Michael Gregory; Cao, Guoqing; Escribano, Ana

Maria; Fernandez, Maria Carmen; Lander, Peter Ambrose;

Mantlo, Nathan Bryan; Martin de la Nava, Eva

Maria; Mateo Herranz, Ana Isabel; Mayhugh, Daniel Ray;

Wang, Xiaodong

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 134 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.								APPLICATION NO.						DATE			
WO	2005	0978	06		A1	_	2005	1020	1						2	0050	317	
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							GR,											
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ĠQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	TG												
AU	2005	2309	15		A1		2005	1020		AU 2	005-	2309	15		2	0050	317	
CA	2557	010			A1		2005	1020		CA 2	005-	2557	010		2	0050	317	
EP	1735	320			A1		2006	1227		EP 2	005-	7259	68		2	0050	317	
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		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,	
		HR,	LV,	MK,	YU													
NC	2006	50047	63		Α		2006	1122		NO 2	006-	4763			2	0061	020	
PRIORIT	Y APE	PLN.	INFO	.:						US 2	004-	5571	34P		P 2	0040	326	
										US 2	004-	6211	62P		P 2	0041	022	
										WO 2	005-	US93	01		W 2	0050	317	
OTHER S	OURCE	E(S):			MAR	PAT	143:	4058	09									

AB Title compds. I [n = 0-3; q = 0-2; W, X, Y and Z independently = CH, C, N, etc.; A = 5-6 membered ring wherein one of W, X, Y or Z may be absent with

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

provisions; K = bond, CO or S(O)p; p = 0-2; R1 when n = 0 and K is CO or S(O)p= -0-alkyl, -0-aryl, -0-alkenyl, etc. and R1 when n = 1-3 and K is a bond = OH, alkyl, alkenyl, etc.; R2 = H, halo, alkynyl, etc.; R3 = H, aryl, cycloalkyl, etc.; R4 = NR7R8; R5 = H, OH, halo, etc.; R6 = H, alkyl, alkenyl, etc.; R7 = alkyl, alkenyl, cycloalkyl, etc.; R8 = aryl, alkylaryl, alkenylaryl, etc.] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of cholesterol ester transfer protein (CEPT). Thus, e.q., II was prepared by cyclization of 2-(thiophen-3-ylaminomethylene)malonic acid di-Et ester followed by acylation/alkylation sequence using iso-Pr chloroformate and Et magnesium bromide and subsequent decarboxylation/amination/acetylation sequence using 3,5bis(trifluoromethyl)benzylamine and acetic anhydride. The ability of I to inhibit the transfer of radiolabeled cholesterol esters between HDL and LDL was evaluated using an in vitro scintillation proximity assay and it was revealed that compds. of the invention possessed an activity of below 100 $\mu M.$ I should prove useful in the treatment of dyslipidemia. Pharmaceutical compns. comprising I are disclosed.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:1130645 HCAPLUS Full-text

6

DOCUMENT NUMBER: 143:386939

TITLE: Preparation of heterocyclic azepine derivatives as

inhibitor of cholesterol ester transfer protein Bell, Michael Gregory; Cao, Guoqing; Escribano, Ana

INVENTOR(S):

Bell, Michael Gregory; Cao, Guoqing; Escribano, An
Maria; Fernandez, Maria Carmen; Mantlo, Nathan

Bryan: Martin de la Nava Fya Maria: Mateo

Bryan; Martin de la Nava, Eva Maria; Mateo Herranz, Ana Isabel; Mayhugh, Daniel Ray; Wang,

Xiaodong

PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA

PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE		i	APPL	ICAT:	ION I	NO.		Di	ATE		
WO	2005	0978	05		A1	-	2005	1020	Ī	70 20	005-t	JS92	94		20	050	317	
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		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
							ID,											
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	
		SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	B₩,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
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		RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
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EP	1732	933			A1		2006	1220		EP 20	005-	7326	43		2	0050	317	
•	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LI,	LT,	LU,	MC,	NL,										
RIORIT	Y APP	LN.	INFO	.:						US 2	004-	5571	34P		P 2	0040	326	
										US 2								
									1	WO 2	005-	US92	94	1	₩ 2	0050	317	
murp c	ALIDOR	101.			MAD	חתם	1/2.	3060	3.0									

OTHER SOURCE(S):

MARPAT 143:386939

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [Q = (CH2)j; n = 0-3; m = 0-6; j = 1-2; q = 0-2; W, X, Y and ZAB independently = CH, C, N, etc.; A = 5-6 membered ring wherein one of W, X, Y or Z may be absent with provisions; K = bond, CO or S(O)p; p = 0-2; R1 = OH, alkyl, alkenyl, etc.; R2 = H, halo, alkynyl, etc.; R3 = H, aryl, cycloalkyl, etc.; R4 = NR7R8; R5 = H, OH, halo, etc.; R6 = H, alkyl, alkenyl, etc.; R7 = alkyl, alkenyl, cycloalkyl, etc.; R8 = aryl, alkylaryl, alkenylaryl, etc.] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of cholesterol ester transfer protein (CEPT). Thus, e.g., II was prepared by cyclization of 4-[isopropoxycarbonyl-(3-methoxycarbonyl-propyl)amino]-thiophene-3- carboxylic acid Me ester (preparation given) using potassium tert-butoxide followed by decarboxylation/amination sequence using 3,5- bis(trifluoromethyl)benzylamine and subsequent acylation using acetic anhydride. The ability of I to inhibit the transfer of radiolabeled cholesterol esters between HDL and LDL was evaluated using an in vitro scintillation proximity assay and it was revealed that compds. of the invention possessed an activity of below 100 µM. I should prove useful in the treatment of dyslipidemia. Pharmaceutical compns. comprising I are disclosed. REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:638853 HCAPLUS Full-text

DOCUMENT NUMBER:

143:153366

TITLE:

Preparation of bicyclic derivatives as PPAR modulators

Conner, Scott Eugene; Mantlo, Nathan Bryan; INVENTOR(S):

Zhu, Guoxin; Herr, Robert Jason

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 193 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE:

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIN) 1	DATE		i	APPL:	ICAT:	ION I	NO.		D2	ATE	'
	WO	2005	0661	36		A1	- :	2005	0721	1	WO 2	004-	JS39	773		21	0041	216
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
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		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,
			AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
			ΜR,	NE,	SN,	TD,	TG											
	ΕP	1706	386			A1		2006	1004		EP 2	004-	8123	19.		2	0041	216
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	FI,	RO,	CY,	TR,	BG,	CZ,	ΕĒ,	HU,	ΡĻ,	SK,	IS		
PRIO	RIORITY APPLN. INFO.:										US 2	003-	5321	39P		P 2	0031	222
											US 2	004-	5866	77 P		P 2	0040	709
										1	WO 2	004-	US39	773	1	v 2	0041	216

$$E-Y \xrightarrow{R8} \begin{array}{c} R32 \\ R32 \\ R10 \\ R2 \\ R11 \\ R11 \\ R$$

$$_{\mathrm{F_{3}C}}$$
 $_{\mathrm{N}}$ $_{\mathrm{Co_{2}H}}$ $_{\mathrm{II}}$

The title compds. I [R1 = H, alkyl, arylalkyl, etc.; R2 = alkyl, heteroalkyl; X = a single bond, O, S, SO2, N; U = an aliphatic linker wherein one carbon atom of the aliphatic linker is optionally replaced with O, NH or S, and wherein such aliphatic linker is optionally substituted with from 1-4 substituents; Y = C, O, S, NH and a single bond; E = CR3R4A or A (wherein A = carboxy, tetrazole, alkylnitrile, etc.; R3 = H, alkyl, alkoxy; R4 = H, alkyl, aryloxy, etc.); R8 = H, alkyl, alkenyl, halo; R9 = H, alkyl, halo, etc.; R10, R11 = H, OH, CN, etc.; R32 = H, halo, alkyl, etc.; AL = fused carbocyclic, fused pyridinyl, fused pyrimidinyl, fused Ph], useful for modulating a peroxisome proliferator activated receptor, were prepared and formulated. E.g., a multi-step synthesis of II, starting from 2-bromo-m-xylene, was given. The binding and cotransfection efficacy values for compds. I which are especially useful for modulating a PPAR receptor, are ≤ 100 nM and ≥ 50%, resp.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:371225 HCAPLUS Full-text

5

DOCUMENT NUMBER:

142:430156

TITLE:

Preparation of benzazepines as inhibitors of cholesterol ester transfer protein for treating

dyslipidemia

INVENTOR(S):

Cao, Guoqing; Escribano, Ana Maria; Fernandez, Maria Carmen; Fields, Todd; Gernert, Douglas Linn; Cioffi, Christopher Lawrence; Herr, Robert Jason; Mantlo, Nathan Bryan; Martin De La Nava, Eva Maria; MateO Herranz, Ana Isabel; Mayhugh, Daniel Ray; Wang,

Xiaodong

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 188 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005037796	A1	20050428	WO 2004-US30907	20041007

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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             SN, TD, TG
                                 20050428
                                             AU 2004-282101
                                                                    20041007
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                          A1
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                          A1
                                             EP 2004-793889
                                                                    20041007
     EP 1670768
                          Α1
                                20060621
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
                                 20061031
                                             BR 2004-14186
                                                                    20041007
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     BR 2004014186
                                             CN 2004-80029540
                                                                    20041007
                                 20061115 -
     CN 1863778
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     NO 2006002074
                          Α
                                 20060508
                                             NO 2006-2074
                                                                     20060508
                                             US 2003-509736P
                                                                 Ρ
                                                                    20031008
PRIORITY APPLN. INFO.:
                                             WO 2004-US30907
                                                                 W
                                                                    20041007
                         MARPAT 142:430156
OTHER SOURCE(S):
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GI

Title compds. I [n, m, q = 0-3; p = 1-2; R1 = OH, alkyl, aryl, etc.; R2 = H, OH, halo, etc.; R3 = H; R4 = (un)substituted amino; R5 = H, OH, halo, etc.; R6 = allyl alc., alkoxy, etc.] are prepared For instance, 5-[acetyl(3,5-bis(trifluoromethyl)benzyl)amino]-2,3,4,5- tetrahydrobenzo[b]azepine-1-carboxylic acid iso-Pr ester (II) is prepared in 8 steps from 2-aminobenzoic acid Me ester, Et 4-bromobutyrate and 3,5-bis(trifluoromethyl)benzylamine. II has an IC50 of 293 nM for cholesterol ester transfer protein (CETP). I are useful for treating atherosclerosis and its sequelae.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:902349 HCAPLUS Full-text

DOCUMENT NUMBER: 141:379802

TITLE: Preparation of indole derivatives as PPAR

modulators for treatment of diabetes mellitus,

syndrome X, and related disorders

INVENTOR(S): Conner, Scott Eugene; Knobelsdorg, James Allen;

Mantlo, Nathan Bryan; Mayhugh, Daniel Ray;

Wang, Xiaodong; Zhu, Guoxin;

Schkeryantz, Jeffrey Michael; Michellys, Pierre-Yves

PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Ligand Pharmaceuticals,

Inc.

SOURCE:

PCT Int. Appl., 262 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.				KIN	D	DATE					ION I			D	ATE		
WO	2004	0921	31		A1	_	2004	1028	1						2	0031	231	
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		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ĖS,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
		ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	HU∙,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
	2003														_	0031		
EP	1581											•						
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
							RO,											
US	2006	1669	83.		A1		2006	0727										
PRIORIT	Y APP	LN.	INFO	.:						US 2								
										WO 2	003-	US41	698	1	₩ 2	0031	231	
OTHER S	R SOURCE(S):					PAT	141:	3798	02									

$$E=Y$$
 $X=U=T^1=R^2=R^{33}$
 Z^{12}
 R^9
 I

Title compds. I [wherein T1 = (un)substituted oxazol-4-yl, oxazol-5-yl, thiazol-4-yl, thiazol-5-yl, phenylene; R2 = hetero/alkyl; X = a bond, O, S, SO2, N; U = (un)substituted aliphatic linker wherein 1 C atom of the linker may be replaced with O, NH, or S; Y = C, O, S, NH, and a single bond; E = CR3R4A or A; A = alkylcarboxyl, alkylnitrile, alkylcarboxamide, (un)substituted alkylsulfonamide, alkylacylsulfonamide, alkyltetrazole; R3 =

H, alkyl, alkoxy; R4 = H, aryloxy, (un)substituted alkyl, alkoxy, cycloalkyl, arylalkyl; R3CR4 = (un)substituted cycloalkyl; Z12 = -Z13-alkyl-Z14; Z13 = a single bond, CO, CO2, CONH and derivs., SO2; Z14 = (un)substituted hetero/aryl; R9 = H, alkyl, alkylenyl, halo, allyl, OH and derivs., (un) substituted arylalkyl, heteroaryl; R33 = alkyl, alkoxy, Ph, etc.; R = alkyl, carboxyalkyl, alkylsulfonaminocarbonylmethyl, etc; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators. For example, reacting (5-Hydroxyindol-1- yl)acetic acid Et ester (preparation given) with 4-Chloromethyl-5-methyl-2-(4- trifluoromethylphenyl)oxazole, followed by saponification with NaOH gave II in near quant. yield. The binding and cotransfection efficacy for the compds. of the invention which are especially useful for modulating a PPAR receptor, are < 100 nM and > 50%, resp. I and their pharmaceutical compns. are expected to be effective in treating and preventing Syndrome X, Type II diabetes, hyperglycemia, hyperlipidemia, obesity, coagulopathy, hypertension, atherosclerosis, and other disorders related to Syndrome X and cardiovascular diseases.

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2007 ACS on STN L23 ANSWER 9 OF 19 2004:718289 HCAPLUS Full-text

ACCESSION NUMBER: DOCUMENT NUMBER:

141:243332

TITLE:

Preparation of sulfonamide derivatives, in particular

N, N-benzo[b] thiophene sulfonamides, as PPAR

modulators, especially PPAR agonists

INVENTOR(S):

Conner, Scott Eugene; Gossett, Lynn Stacy; Green, Jonathan Edward; Jones, Winton Dennis, Jr.;

Mantlo, Nathan Bryan; Matthews, Donald Paul; Mayhugh, Daniel Ray; Smith, Daryl Lynn; Vance,

Jennifer Ann; Wang, Xiaodong; Warshawsky,

Alan M.; Winneroski, Leonard Larry, Jr.; Xu, Yanping;

Zhu, Guoxin

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

PCT Int. Appl., 435 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	rent 1		KIN	D	DATE				ICAT:				D?	ATE			
WO	2004	0736	06												20	00402	210
WO	2004																~
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
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							ID,										
		LK,	LR,	LS,	LT,	LU,	LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,
		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
ΑU	2004	2128	87		A1		2004	0902		AU 2	004-	2128	87		2	0040	210
	2512																
	1597						2005										
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BR	2004	0071	80		A		2006	0207		BR 2	004-	7180			2	0040	210
CN	1751	037			A		2006	0322		CN 2	004-	8000	4250		2	0040	210

JP 2006520755 T 20060914 JP 2006-502992 20040210
US 2006217433 A1 20060928 US 2005-542579 20050715
PRIORITY APPLN. INFO.: US 2003-448307P P 20030214
WO 2004-US2015 W 20040210

OTHER SOURCE(S): MARPAT 141:243332

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [wherein A = II, III; D = (CH2)o; B = R1b-[C]q-R1a; E = O, S, AB NH and derivs.; W = -Y - (CR4R5) - Q, H, cyclo/halo/alkyl, acyl; Q = CO2H and derivs.; CO2NH2, sulfonamide, etc.; X = a bond, C, O, S, S[O]p; Z = (un) substituted aliphatic group, aryl, 5- to 10-membered heteroaryl, bi(hetero)aryl, heterocyclyl; o = 0-4; q = 0-3; m = 1-4; n = 1-2; R1, R2 = independently H, wherein when Z = Ph or naphthyl and R2 = H, R1 is not H, halo, (un) substituted alk(en/yn) yl, aryl, or R1 and R2 form a 5- to 8-membered heterocycle; R1a, R1b = independently H, alkyl, or R1 and R1a, R1and R1b, R2 and R1b, or R1a and R1b form a 3- to 6-membered heterocyclyl or carbocyclyl, where at least one of R1a and or R1b is not H; R2a = H, halo, (un) substituted alkyl and wherein R2 and R2a together being a 3- to 8-membered ringR3 = H, halo, CN, (un) substituted cyclo/alkyl, (alkyl) heterocyclyl, etc.; R4, R5 = independently H, halo, alkyl, alkoxy, aryloxy, NH2 and derivs., SH and derivs., or R4CR5 = 3- to 8-membered ring; and pharmaceutically acceptable salts, solvates, hydrates or stereoisomers thereof] were prepared as PPAR modulators, especially PPAR agonists. A multistep synthesis is given for sulfonamide IV. I displayed IC50 and EC50 in the range of about 1 nM to about 5 μM for binding to PPAR alpha, gamma, and delta receptors. I are useful in treating or preventing disorders mediated by a peroxisome proliferator activated receptor (PPAR) such as syndrome X, type II diabetes, hyperglycemia, hyperlipidemia, obesity, coagulopathy, hypertension, arteriosclerosis, and other disorders related to syndrome X and cardiovascular diseases.

L23 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:658169 HCAPLUS Full-text

TITLE: Design and synthesis of $3-(2-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-4-[$

(4-trifluoromethyl-phenyl)-thiophen-2-yl]-propoxy}-

phenyl)-propionic acid as a potent selective

PPAR delta agonist

AUTHOR(S): Wang, Xiaodong; Zhu, Guoxin; Barr,

Robert; Montrose-Rafizadeh, Chahrzad; Osborne, John J.; Yumibe, Nathan; Jett, Donald R.; Zink, Richard W.;

Mantlo, Nathan B.

CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly and Company,

Indianapolis, IN, 46032, USA

SOURCE: Abstracts of Papers, 228th ACS National Meeting,

Philadelphia, PA, United States, August 22-26, 2004

(2004), MEDI-306. American Chemical Society:

Washington, D. C. CODEN: 69FTZ8

Conference; Meeting Abstract

LANGUAGE: English

DOCUMENT TYPE:

AB Pre-clin. studies in obese rhesus monkeys and ob/ob mouse indicated that a selective PPAR delta agonist changes the serum lipoprotein composition by increasing high d. lipoprotein cholesterol (HDLc) while decreasing low d. lipoprotein (LDLc) and fasting triglycerides by regulating the reverse cholesterol transporter ATP-binding cassette A1 (ABCA1) and cholesterol efflux

from many tissues. These results suggested that a selective PPAR delta agonist could provide a new treatment for dyslipidemia and arteriosclerosis associated with metabolic syndrome X. In search of potent and selective PPAR delta agonists, a new class of compds. featuring 2,3,5-tri-substituted thiophenes was designed and synthesized. This presentation discloses the chemical and SAR study around 3-(2-methyl-4-{2-[3-methyl-5-(4-trifluoromethyl-phenyl)-thiophen-2-yl]-propoxy}-phenyl)-propionic acid (1).

L23 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:658044 HCAPLUS Full-text

TITLE: Design and synthesis of novel, potent, and selective

PPAR delta agonists

AUTHOR(S): Conner, Scott E.; Zhu, Guoxin;

Montrose-Rafizadeh, Chahrzad; Barr, Robert J.; Jett,

Don; Zink, Richard W.; Yumibe, Nathan; Mantlo,

Nathan B.

CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly and Company,

Indianapolis, IN, 46285, USA

SOURCE: Abstracts of Papers, 228th ACS National Meeting,

Philadelphia, PA, United States, August 22-26, 2004

(2004), MEDI-180. American Chemical Society:

Washington, D. C. CODEN: 69FTZ8

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

The peroxisome proliferator-activated receptors (PPARs) play an essential role in the processes of lipid homeostasis. Recent studies have found that the PPAR delta isoform is a regulator of serum lipids, and selective agonists have been shown to dramatically lower serum triglyceride (TG) and low-d. lipoprotein (LDL) levels, while increasing high-d. lipoprotein (HDL) levels. There are currently no drugs in clin. use that selectively activate this receptor, although selective PPAR delta agonists have been shown to affect marked changes in the lipid profile in an obese rhesus monkey model. Dyslipidemia is a major risk factor in the development of atherosclerosis, and may be a suitable indication for this plenipotent modulator of lipid metabolism In this presentation, the design and synthesis of potent and selective PPAR delta agonists featuring 2,4,5-substituted thiazoles will be discussed. This presentation demonstrates the chemical and SAR for the representative compound below.

L23 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2007 ACS: on STN

ACCESSION NUMBER: 2004:606448 HCAPLUS Full-text

DOCUMENT NUMBER: 141:157111

TITLE: Preparation of pyrazoles and analogs as PPAR

modulators for treatment of metabolic disorders,

diabetes mellitus, atherosclerosis, and cardiovascular

disorders

INVENTOR(S): Conner, Scott Eugene; Ma, Tianwei; Mantlo, Nathan

Bryan; Mayhugh, Daniel Ray; Schkeryantz, Jeffrey

Michael; Warshawsky, Alan M.; Zhu, Guoxin

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 214 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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APPLICATION NO.
     PATENT NO.
                         KIND
                                DATE
                                                                    DATE
                                            WO 2003-US39119
                                                                    20031231
     WO 2004063166
                          A1
                                20040729
     WO 2004063166
                          8A
                                20050303
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003296404
                          A1
                                20040810
                                            AU 2003-296404
                                                                    20031231
                                20051019
                                            EP 2003-815195
                                                                    20031231
     EP 1585733
                          Α1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, BG, CZ, EE, HU, SK
                                            US 2005-540341
                          A1
                                20061026
                                                                    20050621
     US 2006241157
                                             US 2003-438563P
                                                                 Ρ
                                                                    20030106
PRIORITY APPLN. INFO.:
                                             WO 2003-US39119
                                                                    20031231
                                                                 W
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OTHER SOURCE(S): MARPAT 141:157111

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Title pyrazoles, imidazoles, and (is)oxazoles I [wherein R1 = H, AΒ (un) substituted alkyl, alkenyl, (hetero) aryl(alkyl), arylheteroalkyl, cycloalkylaryl(alkyl); R2 = absent, (hetero)alkyl; R8 = H, alkyl, alkylenyl, halo; R9 = H, (un) substituted alkyl, alkylenyl, halo, aryl(alkyl), heteroaryl, allyl, alkoxy, alkylthio, etc.; R10, R11 = independently H, OH, CN, NO2, halo, oxo, (un) substituted (halo) alkyl, alkoxy, cycloalkyl, (hetero) aryl(alkyl), cycloalkylaryl(alkyl), aryloxy, acyl, carboxy, amino, sulfamoyl, etc.; R32 = bond, H, halo, (halo)alkyl, alkyloxo; E = (un)substituted carboxy(methyl), tetrazolyl(methyl), nitriloalkyl, carboxamido(methyl), sulfonamido(methyl); U = (un) substituted aliphatic linker wherein one C of the linker is optionally replaced with O, NH, or S; X = bond, O, S, SO2, NH; Y = bond, CH2, NH; Z1, Z2 = independently N, O, C, whit the proviso that at least one of Z1 and Z2 = N; 23 = N, O, C; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators (no data). For example, chlorination of [3-methyl-1-(4-trifluoromethylphenyl)-1H-pyrazol-4-yl]methanol with MeSO2Cl and TEA in CH2Cl2, followed by coupling with (4-hydroxy-2- methylphenoxy)acetic acid Me ester using Cs2CO3 in acetonitrile and saponification with NaOH in MeOH

II

provided II. I and their pharmaceutical compns. are expected to be effective in treating and preventing metabolic disorders, diabetes mellitus, atherosclerosis, and cardiovascular disorders (no data).

L23 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN 2004:606447 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

141:157110

TITLE:

Preparation of a pyrazole as a PPAR modulator for treatment of diabetes mellitus, inflammatory diseases,

and other disorders

INVENTOR(S):

Conner, Scott Eugene; Mantlo, Nathan Bryan;

Mayhugh, Daniel Ray; Zhu, Guoxin

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA PCT Int. Appl., 30 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE		i	APPL:		ION I			D?	ATE		
	WO	2004	0631	 65		A1	_	2004	0729	,						20	0031	231	
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚŻ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜŻ,	NI,	NO,	
			NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
			TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
		2003																	
	ΕP	1583	746			A1		2005	1012		EP 2	003-	8151	93		2	0031	231	
		R:	AT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
								RO,											
	US	2007	0432	20.		A1		2007	0222										
PRIO	RIT	Y APP	LN.	INFO	.:			. 0			US 2	003-	4385	63P		P 2	0030	106	
										,	WO 2	003-	US39	117	,	W 2	0031	231	
0 T																			

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$$_{\mathrm{F_{3}C}}$$
 $^{\mathrm{Me}}$ $^{\mathrm{Me}}$ $^{\mathrm{OH}}$

The present invention is directed to a compound, [2-methyl-4-[[[3-methyl-1-AΒ (4-trifluoromethylphenyl)-1H-pyrazol-4-yl]methyl]sulfanyl]phenoxy]acetic acid (I), and pharmaceutically acceptable salts, solvates; and hydrates thereof for use as a peroxisome proliferator activated receptor (PPAR) modulator. Examples include three synthetic methods for the preparation of I, as well as protocols and some data for biol. assays. For instance, I was prepared by alkylation of (4-mercapto-2-methylphenoxy)acetic acid Et ester with 4chloromethyl-3-methyl-1-(4-trifluoromethylphenyl)-1H-pyrazole using Cs2CO3 in acetonitrile, followed by saponification with NaOH in MeOH. In binding studies, I activated huPPARO, PPARO, and PPARy with EC50 values of 20 nM, 1800 nM, and 2600 nM, resp. Thus, I and its pharmaceutical compns. are expected to be effective in treating and preventing diabetes mellitus, cardiovascular disorders, inflammatory conditions, and other disorders (no data).

L23 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:606439 HCAPLUS Full-text

DOCUMENT NUMBER:

141:157107

TITLE:

Preparation of fused heterocyclic derivatives as PPAR

modulators for treatment of diabetes mellitus,

syndrome X, and related disorders

INVENTOR(S):

Conner, Scott Eugene; Mantlo, Nathan Bryan;

Zhu, Guoxin

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 294 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

I	PAT	ENT	NO.			KINI)	DATE			APPL	ICAT	ION I	NO.		Dž	ATE		
7	 WO	2004	0631	55		A1		2004	0729	,	WO 2	003-	US39:	120		20	0031	231	
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,	
			NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	
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			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,	MR,	NE,	SN,	TD,	TG
(CA	2509	202			A1		2004	0729		CA 2	003-	2509	202		21	0031	231	•
1	ΑU	2003	2964	05		A1		2004	0810		AU 2	003-	2964	05		2	0031	231	
I	EΡ	1585	726			A1		2005	1019		EP 2	003-	8151	96		21	0031	231	
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			·IE,	SI,				RO,											
	JΡ	2006	5162	54		T		2006	0629		JP 2	004-	5665	26		2	0031	231	
	US	2006	2057	44		A1		2006	0914		US 2	005-	5394	7 7		2	0050	621	
PRIOR	ITY	APP	LN.	INFO	.:						US 2	003-	4385	40P		P 2	0030	106	
											US 2	003-	4385	41P		P 2	0030	106	
											WO 2	003-	US39	120		W 2	0031	231	
OTHER	SC	URCE	(S):			MAR	PAT	141:	1571	07									

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$$\mathsf{HO} \underbrace{\hspace{1cm}}^{\mathsf{Me}} \mathsf{CF3} \quad \mathsf{II}$$

Title compds. I [wherein R1 = H, (un) substituted alkyl, alkenyl, AΒ (hetero)aryl(alkyl), arylheteroalkyl, cycloalkylaryl(alkyl); R2 = absent, (hetero) alkyl; R8 = H, alkyl, alkylenyl, halo; R9 = H, (un) substituted alkyl, alkylenyl, halo, aryl(alkyl), heteroaryl, allyl, alkoxy, alkylthio, etc.; R10, R11 = independently H, OH, CN, NO2, halo, oxo, (un) substituted (halo) alkyl, alkoxy, cycloalkyl, (hetero)aryl(alkyl), cycloalkylaryl(alkyl), aryloxy, acyl, carboxy, amino, sulfamoyl, etc.; R32 = bond, H, halo, (halo)alkyl, alkyloxo; AL = fused carbocyclic, pyridinyl, pyrimidinyl, Ph; B = S, O, CH2, NH; E = (un) substituted carboxy (methyl), tetrazolyl (methyl), nitriloalkyl, carboxamido(methyl), sulfonamido(methyl); U = (un)substituted aliphatic linker wherein one C of the linker is optionally replaced with O, NH, or S; X = bond, O, S, SO2, NH; Y = bond, CH2, NH; Z = N, CH, with the proviso that when B =CH2, then Z = N; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators (no data). For example, (4-mercapto-2methylphenoxy)acetic acid Me ester was coupled with toluene-4-sulfonic acid 2-(4-trifluoromethylphenyl)-5,6-dihydro-4H-cyclopentathiazol-4- ylmethyl ester in the presence of Cs2CO3 in anhydrous acetonitrile to give the [[(cyclopentathiazolylmethyl)sulfanyl]phenoxy]acetate (45%), which was saponified with LiOH in THF to afford II (quant.). I and their pharmaceutical compns. are expected to be effective in treating and preventing Syndrome X, Type II diabetes, cardiovascular disorders, inflammatory conditions, and other disorders (no data).

L23 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:829477 HCAPLUS Full-text

DOCUMENT NUMBER:

139:381431

TITLE:

Design and Synthesis of a Potent and Selective Triazolone-Based Peroxisome Proliferator-Activated

Receptor α Agonist

AUTHOR(S):

Xu, Yanping; Mayhugh, Daniel; Saeed, Ashraf;

Wang, Xiaodong; Thompson, Richard C.;

Dominianni, Samuel J.; Kauffman, Raymond F.; Singh, Jaipal; Bean, James S.; Bensch, William R.; Barr, Bensch, John, Montrose-Rafizadeh

Robert J.; Osborne, John; Montrose-Rafizadeh,

Chahrzad; Zink, Richard W.; Yumibe, Nathan P.; Huang, Naijia; Luffer-Atlas, Debra; Rungta, Deepa; Maise,

Dale E.; Mantlo, Nathan B.

CORPORATE SOURCE:

Lilly Research Laboratories, Lilly Corporate Center,

Eli Lilly Company, Indianapolis, IN, 46285, USA

SOURCE:

Journal of Medicinal Chemistry (2003), 46(24),

5121-5124

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:381431

GI

A new series of hPPARα agonists containing a 2,4-dihydro-3H-1,2,4- triazol-3-AB one (triazolone) core is described leading to the discovery of I (LY518674), a highly potent and selective PPAR α agonist.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:696736 HCAPLUS Full-text

DOCUMENT NUMBER: 139:230769

Preparation of (arylalkyl)thiazoles and oxazoles as TITLE:

> peroxisome proliferator activated receptor modulators for treating diabetes mellitus and atherosclerosis

Conner, Scott Eugene; Mantlo, Nathan Bryan;

INVENTOR(S):

Zhu, Guoxin

Eli Lilly and Company, USA PATENT ASSIGNEE(S):

PCT Int. Appl., 153 pp. SOURCE:

CODEN: PIXXD2 Patent

DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.				KIN	D	DATE		i	APPL	ICAT	ION	NO.		D	ATE	
						-						÷-			_		
WO	2003	0721	02		A1		2003	0904	1	WO 2	003-	US26	80		2	0030	213
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		L\$,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	•					
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
AU	2003	2149	32		A1		2003	0909		AU 2	003-	2149	32		2	0030	213
ΕP	2003214932 1480642			A1		2004	1201		EP 2	003-	7107	80		2	0030	213	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK 20050922 JP 2003-570848 20030213 JP 2005528346 Т US 2004-505103 20040817 US 2006084663 A1 20060420 20020225 US 2002-359807P PRIORITY APPLN. INFO .: WO 2003-US2680 W 20030213

OTHER SOURCE(S):

MARPAT 139:230769

GΙ

Title compds. I [wherein R3 = H or alkoxy; R4 = H or alkyl; R5 = alkyl, AΒ alkenyl, or (un) substituted aryl (oxy) alkyl or arylthioalkyl; R6 = CF3, OCF3, (hydroxy)alkyl, alkylcarbamoyl, carboxyalkoxy, or (un)substituted aryloxy, arylthio, pyridinyl, pyrimidinyl, pyrazinyl, or arylalkyl; R7 and R8 = independently H, CF3, or alkyl; R9 and R10 = independently H, alkyl, alkenyl, or alkoxy; T1 = C or N; Q = bond, O, O(CH2)q, or C; q = 1-2; W = 0, S, SO2, NHSO2, etc.; X = CmH2m; m = 0-2; Y and Z = independently O, N, or S wherein atleast 1 of Y and Z = O or S; A = CO2H, alkylnitrile, CONH2, or (CH2)nCO2R19; n = 0-3; R19 = H or (un)substituted alkyl or arylmethyl; and pharmaceutically acceptable salts thereof] were prepared as peroxisome proliferator activated receptor (PPAR) agonists (no data). For example, (4-mercapto-2methylphenoxy) acetic acid Et ester was coupled with 5-chloromethyl-4phenethyl-2-(4-trifluoromethylphenyl)thiazole in the presence of Cs2CO3 in MeCN to give the (phenylthiomethyl)thiazole (83.5%), which was saponified with LiOH in THF to provide II. I and their pharmaceutical compns. are useful for the prevention and or treatment of diabetes mellitus and atherosclerosis (no data).

Ι

ΙI

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:696734 HCAPLUS Full-text

7

DOCUMENT NUMBER:

139:230768

TITLE:

Preparation of (arylalkyl)thiazoles and oxazoles as peroxisome proliferator activated receptor modulators

for treating diabetes mellitus, syndrome X, and

cardiovascular disease

INVENTOR(S):

Conner, Scott Eugene; Knobelsdorf, James Allen; . Mantlo, Nathan Bryan; Schkeryantz, Jeffrey Michael; Shen, Quanrong; Warshawsky, Alan M.;

Zhu, Guoxin

PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA PCT Int. Appl., 223 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.					D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
WO	2003	0721	00		A1	_	2003	0904		WO 2	003-	US26	 79		2	0030	213
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
											MW,						
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
							VN,										
	RW:										ΤZ,						
											CH,						
											NL,						BF,
		ВJ,	CF,	CG,	CI,						ML,						
	2003										003-						
EP	1480																
	R:										IT,						PT,
											TR,						
JP	2005	5290	77		\mathbf{T}		2005	0929		JP 2	2003-	5708	46		2	0030	213
US	2005	1074	49		A1		2005	0519		US 2	2004-	5050	89		2	0040	817
US	7153	878			В2		2006	1226									
PRIORIT	Y APP	LN.	INFO	.:							2002-						
										WO 2	2003-	US26	79		W 2	0030	213
OTHER S	OURCE	(S):			MAR	PAT	139:	2307	68			٠					

AB Title compds. I [wherein R3, R4, R30, and R40= independently H, alkyl, halo, or alkoxy; R5 = (un)substituted alkyl, alkenyl, aryl(oxy)alkyl, or arylthioalkyl; or when R5 = alkyl, R5 may be combined with W to form a

heterocycloalkyl fused to the oxazole or thiazole ring; R6 = trihalomethyl, trihalomethoxy, (hydroxy)alkyl, alkylcarbamoyl, tetramethyldioxaborolanyl, halo, alkanoyl, carboxyalkoxy, (cyclo)alkoxy, tetrahydropyranyloxy, morpholinyl, or (un) substituted aryloxy, arylthio, heterocyclyloxy, pyridinyl, pyrimidinyl, pyrazinyl, or arylalkyl; R7 and R8 = independently H, CF3, or alkyl; R9 = (un)substituted (aryl)alkyl or alkenyl; R10 = H or alkyl; Q = a bond, O, or CH2; T1 = C or N; W = CH2, O, OCH2, S, SO2, or (un)substituted CONH, NH, or NHCH2; X = C, CH2C, or CCH2; Y and Z = independently O, N, or S wherein at least 1 of Y and Z = O or S; A = CO2H, alkylnitrile, CONH2, or (CH2)nCO2R19; n = 0-3; R19 = H or alkyl; and pharmaceutically acceptable salts thereof] were prepared as peroxisome proliferator activated receptor δ (PPAR δ) modulators (no data). For example, (4-mercapto-2-methylphenoxy) acetic acid Et ester was condensed with 1-[4-[2-(2-chloro-6-fluorophenyl)ethyl]-2-(4trifluoromethylphenyl)thiazol-5-yl]ethanol in the presence of PBu3 and 1,1'-(azodicarbonyl) bipiperidine in toluene. Deesterification with LiOH in THF produced II. I and their pharmaceutical compns. are useful for the prevention and or treatment of diabetes mellitus, syndrome X, and cardiovascular disease (no data).

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN 2003:454296 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

139:36527

TITLE:

Preparation of imidazolidinone derivatives as

peroxisome proliferator activated receptor agonists

INVENTOR(S):

Gibson, Tracey Ann; Johnston, Richard Duane; Mantlo, Nathan Bryan; Thompson, Richard Craig;

Wang, Xiaodong; Winneroski, Leonard Larry,

Jr.; Xu, Yanping

PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA

PCT Int. Appl., 408 pp.

CODEN: PIXXD2 Patent

DÓCUMENT TYPE:

English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.			KIN)	DATE		Ī	APPL:	ICAT:	ION 1	10.		D <i>l</i>	ATE	
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WO	2003	0481	30		A2		2003	0612	1	WO 20	002-1	JS36:	128		20	0021	L26
WO	2003																
	W:						ΑU,										
							DK,										
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	ĴΡ,	ΚE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,
							MD,										
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,
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	RW:						MZ,										
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							IT,								BF,	ВJ,	CF,
							GQ,										
	2468						2003										
	2002																
ΕP	1453	811			A2		2004	0908		EP 20	002-	8044	16		2	0021	126
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
	•	ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
BR	2002	0144	37		Α		2004	1013		BR 20	002-	1443	7		2	0021	126
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NZ 532909	Α	20060831	NZ	2002-532909		20021126
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ZA 2004004173	A	20050823	ZA	2004-4173		20040527
IN 2004KN00716	Α	20061110	IN	2004-KN716		20040527
NO 2004002737	Α	20040817	NO	2004-2737		20040629
PRIORITY APPLN. INFO.:			US	2001-334453P	P	20011130
			WO	2002-US36128	W	20021126

OTHER SOURCE(S):

MARPAT 139:36527

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$$\begin{array}{c|c}
E \\
Y \\
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R9 \\
R21 \\
R22 \\
R2
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The present invention is directed to compds. represented by the following AB structural Formula (I) [wherein R1 = H, each (un) substituted C1-C8 alkyl, aryl-C0-4-alkyl, heteroaryl-C0-4-alkyl, C3-6 cycloalkylaryl-C0-2-alkyl, or CH2-C(O)-R17-R18 (wherein R17 = O, NH; R18 = optionally substituted benzyl); R2 = C1-6 alkyl, C1-6 alkenyl, aryl-C0-4-alkyl, heteroaryl-C0-4-alkyl, C1-4alkylsulfonamide, C1-4 alkylamide, OH, C1-4 alkoxy, C3-6 cycloalkyl; W = O, S; X = an optionally substituted C1-5 alkylene linker wherein one carbon atom of the linker may optionally be replaced with O, NH, S, and optionally two carbons together may form a double bond; Y = C, O, S, NH, a single bond; E = C(R3)(R4)A, A, (CH2)nCO2R19; wherein A = CO2H, C1-3 alkylnitrile, carboxamide, each (un) substituted sulfonamide, acylsulfonamide, tetrazole, or isoxazole; R3 = H, C1-5 alkyl, C1-5 alkoxy; R4 = H, halo, each (un) substituted C1-5 alkyl, C1-5 alkoxy, C3-6 cycloalkyl, aryl-C0-4-alkyl, aryl-C0-2 alkoxy, or Ph; or R3 and R4 are combined to form a C3-8 cycloalkyl; R19 = H, each (un) substituted arylmethyl or C1-4 alkyl; n = 0-3; R21 = H, oxo, each (un)substituted C1-6alkyl, aryl, C1-4 alkylaryl, or heteroaryl; R22 = H, each (un)substituted C1-6 alkyl, aryl, C1-4 alkyl-aryl, or heteroaryl]. These compds. are useful for preventing or treating diabetes mellitus or treating syndrome X or cardiovascular disease (no data). Thus, To a solution of 2-methyl-2-[2methyl-4-[2-(3-methyl-2-oxoimidazolidin-4- yl)ethoxy]phenoxy]propionic acid Et ester (0.040 g) in DMF (2.0 mL), was added NaH (60% in mineral oil, 0.0066 g) in one portion and the mixture was stirred for 15 min at room temperature, treated with 4-tert-butylbenzyl bromide (0.030 mL), and stirred for 4 h at room temperature to give, after workup, an Et ester intermediate, which was treated with a mixture of MeOH (2 mL)/5.0 N NaOH (1 mL) at room temperature overnight, concentrated, diluted with water (2 mL), cooled down to 0°, and acidified to pH 2 by adding concentrated HCl dropwise to give, after purification on a Chem elut 1005 tube, 2-[4-[2-[1-(4-tert-Butylbenzyl)-3methyl-2-oxoimidazolidin-4-yl]ethoxy]-2- methylphenoxy]-2-methylpropionic acid as an colorless oil (0.022 g, 42%).

L23 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:618214 HCAPLUS Full-text

TITLE: Synthesis and SAR studies toward a selective PPAR

 α -Agonist

AUTHOR(S): Wang, Xiaodong; Barr, Robert J.; Bean, James S.; Kauffman, Raymond F.; Mayhugh, Daniel R.;

Montrose-Rafizadeh, Chahrzad; Renner, Joan; Saeed, Ashraf; Singh, Jaipal; Zink, Richard W.; Mantlo,

Nathan B

CORPORATE SOURCE:

Lilly Research Laboratories, Eli Lilly and Company,

Indianapolis, IN, 46285, USA

SOURCE:

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Abstracts of Papers, 224th ACS National Meeting, Boston, MA, United States, August 18-22, 2002 (2002), MEDI-363. American Chemical Society: Washington, D.

C.

CODEN: 69CZPZ

DOCUMENT TYPE:

Conference; Meeting Abstract

LANGUAGE: English

AB Peroxisome Proliferator Activated Receptors (PPARs) are members of the nuclear hormone receptor super family. The PPAR alpha receptor subtype is reported to be activated by medium and long-chain fatty acids. Synthetic agonists include the fibrates, which elevate HDL-cholesterol and induce the expression of apoAI, a protein integral to the HDL-cholesterol particle. Activation of the PPAR alpha receptor is also involved in stimulating fatty acid beta-oxidation and produces a substantial reduction in plasma triglycerides. Herein we describe the discovery and synthesis of LY518674, a selective PPAR alpha agonist possessing activity in the 10-9 M range.